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EMEA

European Rates Weekly

Trading growth vs inflation divergence

- **Solid Euro area growth & low inflation are consistent with forward ECB tightening. The kicker could be that the ECB has opted for too much gradualism against the robust economic backdrop. On inflation, the baseline is low/unanchored, but not static. The HICP trend looks to be gently upward sloping. Elsewhere, we look at ASW cheapening levels and trades on ECB taper. Box trades look most robust to flow/stock debates.**

- **UK – MPC hike without conviction:** The first hike in over 10 years was taken as dovish with the MPC removing all hawkish guidance. The upshot is that the MPC has gone to a lot of effort for minimal re-pricing of the front-end. We doubt that was the intention, making the front-end vulnerable to a fight-back from the MPC. The best risk-reward for the medium-term is still with 2s10s flatteners in our view.

- **Periphery tightening – drivers and risk factors:** We believe it is a combination of forces that means the bullish impetus is likely to remain for the near-term. We continue to think political risks may weigh on the market in early 2018, but for now, a grind tighter looks like the path of least resistance.

- **Euro inflation – declining net supply:** We project net inflation-linked supply in 2018 at just €12bn, declining by €6bn from 2017 and close to its lowest level in the last four years.

- **Bearish medium-term plays via spread caps:** Forward guidance, higher (i.e. less negative) net issuance and macro conditions argue for a steeper curve next year. We recommend expressing this view via spread options, given their limited downside and currently historically cheap prices.

- **EFSF/ESM spread differentials going into 2018:** It's been a year of elevated EFSF issuance (its €40bn target volume dwarfing the ESM's €12.5bn). However, the credits' supply volumes are set to normalize in 2018. As such, we believe the EFSF can continue to rally towards the ESM over the near and medium-term.

- **Supply:** EGB supply next week is scheduled from Austria (5/10yr), Germany (5yr/Bundei30) and Ireland. The UK issues new IL48 in a syndication next week and gilt Jul23s on Thursday (see preview).

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See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

Trading growth vs. inflation divergence

Harvinder Sian
Andrea Appeddu

What framework should investors adopt in the face of higher Euro area growth but ongoing downside inflation surprises? As the Fed experience shows - central bank reaction functions are sensitive to both developments.

As core inflation bottoms out, and with lead indicators suggesting ongoing growth at 2x trend, the markets can price forward ECB rates higher. This infers an ongoing steep € curve. The kicker may be markets questioning ECB forward guidance shifts in 2018 because the ECB may have adopted a policy of too much gradualism as hinted at by Benoit Coeure's semi-dissent on policy. Inflation projections will probably be the actual trigger for material ECB repricing and we see Euro output gap trends and USD appreciation as risk factors that get the ECB closer to mission accomplished on Staff forecasts.

As for inflation, we explain inflation should be low and unanchored with backward-looking features. That doesn't mean that inflation variation is dead and we diagnose the recent downside surprises in core inflation as a payback to over-exuberant rises in April-August relative to the underlying trend. We think this underlying inflation trend is gently sloping higher and find that some of the ECB's non-public models are pointing the same way.

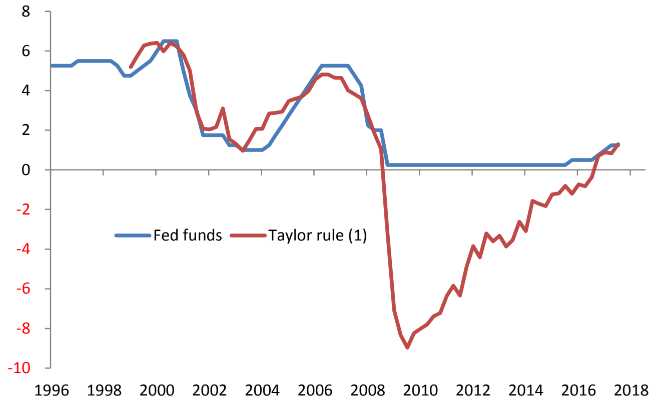
Finally, we look at ASW risk for 2018 in light of the ECB taper. Our models point to bonds cheapening across the German futures curve with longer maturities underperforming Eonia the most. These forecasts incorporate some German GC/Eonia cheapening but stock effects may see GGC/Eonia static instead. In that case, Schatz and Bobl see little movement but Bunds and Buxl cheapen. Given the headwind of forward contract roll (carry) and stock versus flow we favor trading OBL/Bund or Bund/Buxl ASWE boxes.

1. Follow-on from the ECB meeting

This week's surprise drop in core HICP (for the 2nd consecutive month) amid ongoing strong Q3 GDP (0.6%) is the perfect backdrop to summarize the dilemma for ECB policy makers and investor thinking about bond valuations. The key question is: how to weigh the low current prints against growth data that strongly suggests in a Phillips curve framework that forward inflation should be higher?

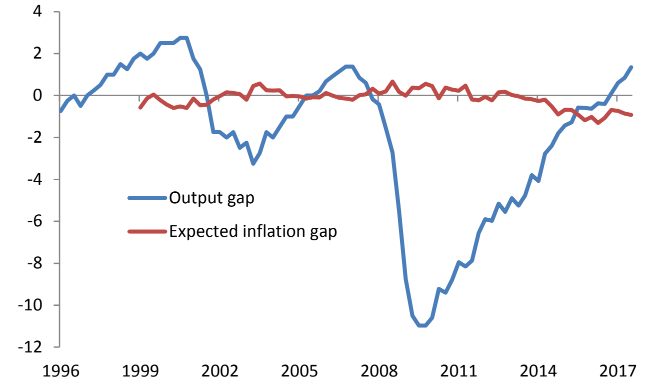
The answer is that both inflation and growth matter and there is a lesson from the FOMC that is appropriate. Figure 1 shows a Taylor rule for the Fed that incorporates time-varying neutral rates. The residuals from the rule correlate with curve slope before the crisis (loose/tight policy means excessively steep/flat curves). The Fed policy rule has caught up to the actual policy setting on the back of the output gap metric and in spite of the drop in inflation expectations. We think that a similar inference is *already emerging* in Europe.

Figure 1. Fed Taylor rule using time-varying neutral rates*



Source: Citi Research, * based on a model presented in *"The Fed is Ready to Raise Rates: Will Past be Prologue?"* (Richard Clarida, 2015).

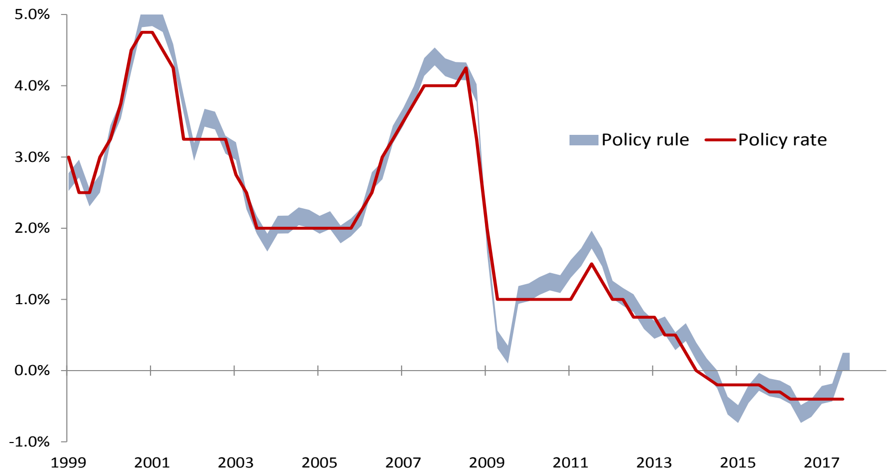
Figure 2. Rate hikes appropriate even as inflation becomes unanchored given the strong push from the output gap.



Source: Citi Research

Figure 3 shows a policy rule for the ECB which incorporates forward-looking information on where growth and inflation is expected in 1-year via the ECB Survey of Professional Forecasters (SPF), which was last updated the day after the ECB meeting on 27-Oct. It has the benefit of ignoring current inflation and setting policy to both expected growth and inflation. The key takeaway is that ECB policy is on the stimulative side.

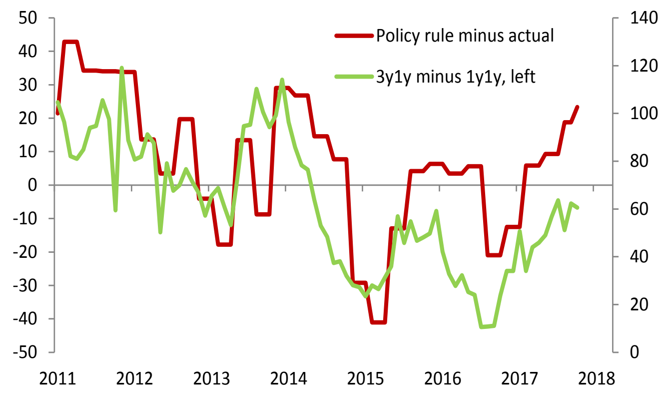
Figure 3. ECB Taylor rule *



Source: Citi Research * Bletzinger and Wieland (2016), *"Forward guidance and 'lower for longer': The case of the ECB"*, Institute for Monetary and Financial Stability

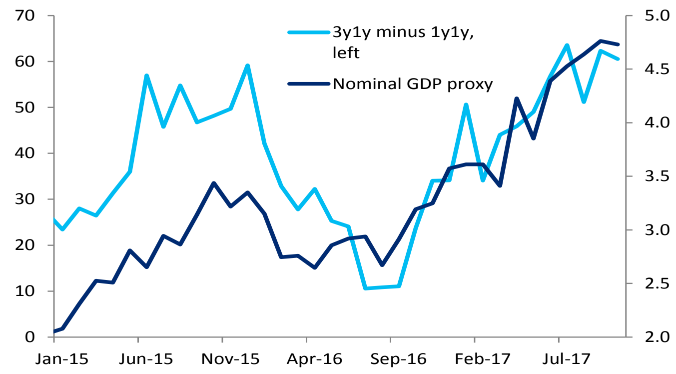
The signal value for investor lies in the fact that the gap between the policy rule and actual policy rates is correlated to front end slope. Figure 4 shows that easy ECB policy is coincident with more 3y1y-1y1y steepening. Since 2016, the market has been trading on nominal GDP trends (Figure 5).

Figure 4. ECB policy rule minus actual policy rate is correlated to curve slope.



Source: Citi Research

Figure 5. Nominal GDP proxy has been highly correlated to ECB expectations since 2016*



Source: Citi Research *Nominal GDP proxy here is EC Sentiment index prediction of GDP growth (YY) plus core HICP.

How time-consistent is ECB forward guidance?

The main point made above is that even in the face of soft inflation it is not correct to view ECB policy as low forever because the output gap matters too. In that context, how robust is the current forward guidance and pricing?

There are two sources of volatility around the ECB guidance message. The first volatility source is the connection of forward guidance to economic data. In that context, we were not surprised to see dissent on the decision to keep APP open-ended by the German block at the ECB (Weidmann, Lautenschlaeger, Knot, and Nowotny). The interesting semi-dissent was from Benoit Cœuré.

Cœuré in an interview with Le Journal du Dimanche said that "*I am hopeful that this will be the last extension.* This is interesting because Cœuré's speeches have cited two standout themes: (i) that negative rates at some point will impede policy transmission by weakening bank profitability (the so called 'reversal rate'); and (ii) that forward guidance is based around a fixed and immovable view that the policy reaction function is geared to achieving near but below 2% HICP and a variable component that commits the ECB to a policy path contingent on its forecasts for the economy and inflation being realized.

- His point is that the variable guidance components (rates rising 'well past' and QE extension/size) need to keep up with the data, otherwise the ECB risks bigger volatility further down the line when it does shift guidance. We think that this is precisely the risk that ECB faces in 2018 because of likely excessive gradualism.

- In practice, this plays out for rates markets either through higher HICP prints or higher inflation forecasts. We do not expect the ECB to be able to achieve its inflation mandate owing to unanchored inflation expectations being long lived[1] but inflation forecasts will be sensitive to growth. In that respect, the new 2020 HICP projections on a straight-line extrapolation of Sep17 projections (Figure 6) would point to 1.8%.

Figure 6. HICP inflation projections for the euro area (year-on-year % changes)

	Lower range	Central projectio	Upper range
2017Q3	1.3	1.4	1.5
2017Q4	1.0	1.2	1.5
2018Q1	0.5	0.9	1.4
2018Q2	0.5	1.1	1.7
2018Q3	0.5	1.3	2.1
2018Q4	0.5	1.4	2.2
2019Q1	0.6	1.4	2.3
2019Q2	0.6	1.4	2.3
2019Q3	0.7	1.5	2.3
2019Q4	0.8	1.6	2.4

Source: ECB, Citi Research

Figure 7. Real GDP projections for the euro area (quarter-on-quarter % changes)

	Lower range	Central projectio	Upper range
2017Q3	0.4	0.5	0.7
2017Q4	0.2	0.5	0.7
2018Q1	0.1	0.4	0.7
2018Q2	0.1	0.4	0.7
2018Q3	0.1	0.4	0.7
2018Q4	0.1	0.4	0.7
2019Q1	0.1	0.4	0.8
2019Q2	0.1	0.4	0.8
2019Q3	0.1	0.4	0.8
2019Q4	0.1	0.4	0.8

Source: ECB, Citi Research

[1] We discuss inflation and inflation expectations later.

- A quicker narrowing of the output gap should at the minimum see markets price some probability of mission-accomplished 1.9% 2020 HICP projections in 2018.

The second source of potential time inconsistency is international and concerns the implications of a stronger USD. This would be a function of tighter Fed policy and/or fiscal impulse. The combination of the tighter monetary and loose fiscal policy is typically very bullish for a currency.

Our economists expect the Fed to hike in Dec17 and 3-times in 2018. At the same time they also expect some tax reform to pass. Should the USD strengthen, the implications as usual should be important. Aside from tighter EM conditions there should be more noise on the BOJ lifting the 0% 10yr JGB yield target on the idea that USDJPY above 120/125 is politically problematic.

In EURUSD, levels below 1.10 are likely to pressure inflation projections higher. The ECB in its Sep17 projections, when assessing the EURUSD appreciation, noted there is a big difference in GDP and HICP impacts between exogenous FX moves and endogenous moves driven by the better growth outlook. How does this look if the EUR instead depreciates? The answer is that amid strong Euro area growth a depreciation should be seen as an exogenous downward shock and deliver more material growth and inflation.

- **Net, we think that the ECB's excessive gradualism is inconsistent with the Euro area growth trends. Even if spot inflation does not rise, markets should price higher rates via the output gap, with the kicker being that staff projections for 2020 should not be that far from a mission-accomplished level of 1.9%. EURUSD depreciation should be viewed less benignly by the ECB than the recent EUR appreciation. This continues to favor steepening themes and a general bearish € rates bias.**

2. What is the inflation trend?

Euro area HICP surprised for the second month in a row to the downside with Oct-17 HIPC easing to 1.4% driven by lower core inflation. Core inflation has now fallen to a 6-month low. The benchmark core measure (ex-energy, food, alcohol & tobacco) declined from 1.1% to 0.9% YY, the lowest level since May. Services inflation dropped the most (1.2% YY from 1.5%) but non-energy goods inflation also eased slightly (0.4% YY from 0.5%).

Low inflation & downside surprises should be your benchmark….

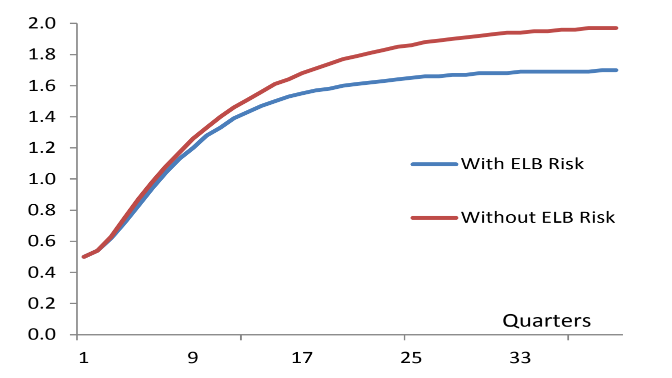
We have been calling for inflation to remain low and systematically surprise to the downside globally. It's one thing to call for low inflation, but why expect the downside surprises? The answer lies in what is driving the inflation process – and bottom-up consensus inflation forecasts are missing a key macro backdrop.

The starting point is the idea that inflation expectations should be unanchored and simply follows from the lower power of central banks to manage the cycle. Ex ante this lower credibility should see lower inflation expectations and high equity risk premia. A formal explanation centers on papers such as "*The Risky Steady State and the Interest Rate Lower Bound*"[2] which make the link between the lower bound and inflation undershoots (Figure 8). This papers summarizes that

> *' …the possibility that the policy rate will become constrained in the future lowers today's inflation by creating tail risk in future inflation and thus reducing expected inflation….. we find this causes inflation to undershoot the target rate of 2% by as much as 45 basis points'*.

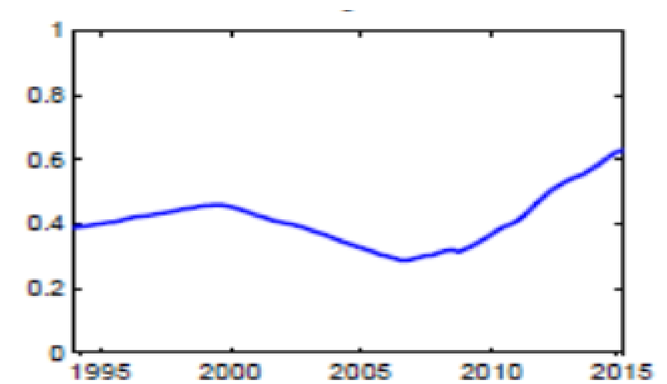
In a nutshell, low inflation expectations and low inflation prints are simply the other side of the coin to the low rate backdrop.

Figure 8. Risk of going back to the Effective Lower Bound (ELB) at the next recession influences today's inflation expectations & inflation data



Source: FRB, Citi Research

Figure 9. RBNZ calculation on the weight placed on past inflation in the inflation generating process (min/max values are 0 and 1).



Source: RBNZ, Citi Research

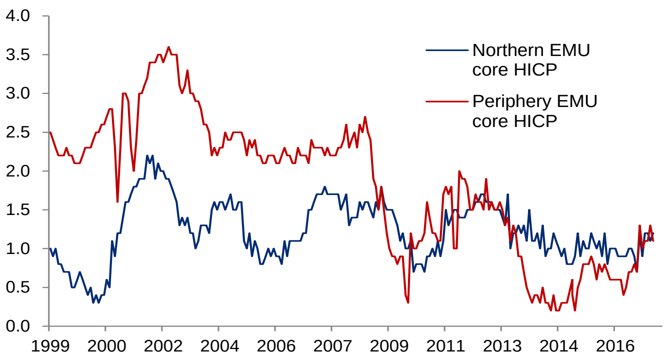
The empirical evidence that this is playing out was analyzed in the IMF Oct-16 WEO in [Global Disinflation in an Era of Constrained Monetary Policy](), and this showed that inflation anchoring was dropping. The RBNZ preceded this analysis when they were attempting to explain inflation undershoots in non-tradable CPI in [Inflation expectations and low inflation in New Zealand]() (RBNZ, Jul-2016), and effectively quantify Mario Draghi's point about inflation becoming more backward looking (Figure 9). More recently, the RBNZ has looked at its forecasting process in a

[2] https://www.federalreserve.gov/econresdata/feds/2016/files/2016009pap.pdf

paper, [Does past inflation predict the future?] (RBNZ, Oct-2017), and concluded that models incorporating past inflation materially improve the forecasts.

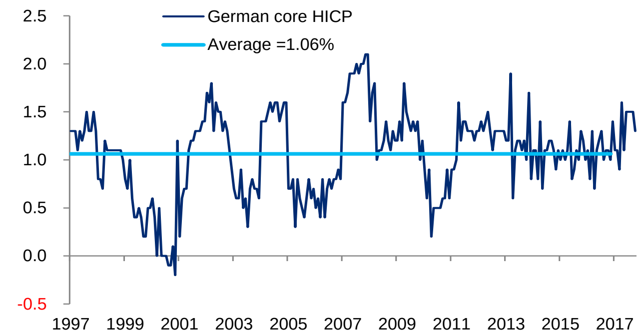
Given the global nature of the lower bound problem, we are incredulous that the consensus should see the persistent (Advanced Economy) downside surprises as a series of time and cross-sectional aberrations.

Figure 10.Northern core HICP versus Periphery core HICP. Pre-crisis bubbles need to be repeated to generate 2% inflation ...



Source: Citi Research, Eurostat

Figure 11. If competitive disinflation is the policy backdrop then the bubble may need to be Germany. Until then German core inflation should be a broad cap for the region.



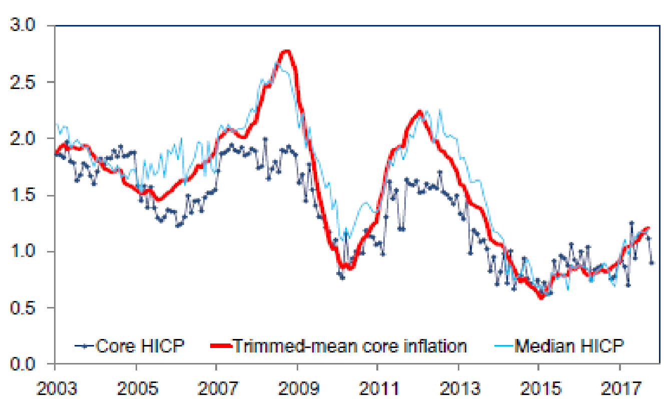
Source: Citi Research, Eurostat

This backdrop largely applies to the Euro area though the ECB has not formalized Draghi's backward inflation features in formal research. There are also Euro specific factors at play. Figure 10 shows the split in core HICP between the North and Periphery. The pre-crisis average of 2% HICP was built on bubble driven high inflation in a number of periphery countries. This has now given way to a mantra of competitive disinflation, meaning that German inflation acts as a soft cap for the region. It may require a German bubble to drive inflation to 2%.

… but even low inflation can still have a cycle

The framework above does not mean that inflation has no variability and in our view the core HICP gains between April-August overstated the true underlying modest uptrend – meaning that recent data in Sep/Oct are correcting to this modest uptrend.

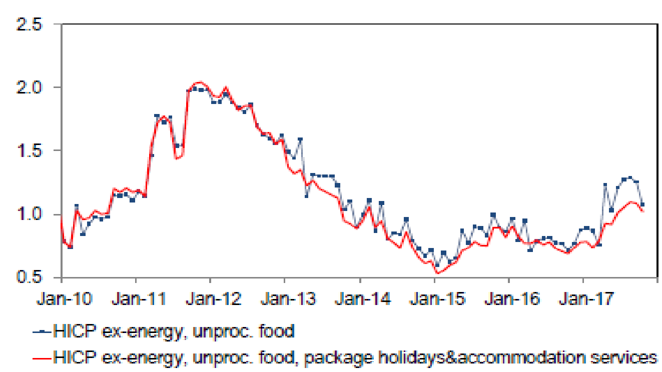
Figure 12. Underlying Inflation Measures (%, YY), 2003-Oct 17



Note: Core inflation is HICP ex-energy, food, alcohol and tobacco.

Sources: Haver Analytics and Citi Research

Figure 13. Core HICP ex holiday-related prices (%,YY), 2010-Oct 17



Note: Citi estimates for package holidays and accommodation services for Oct-17.

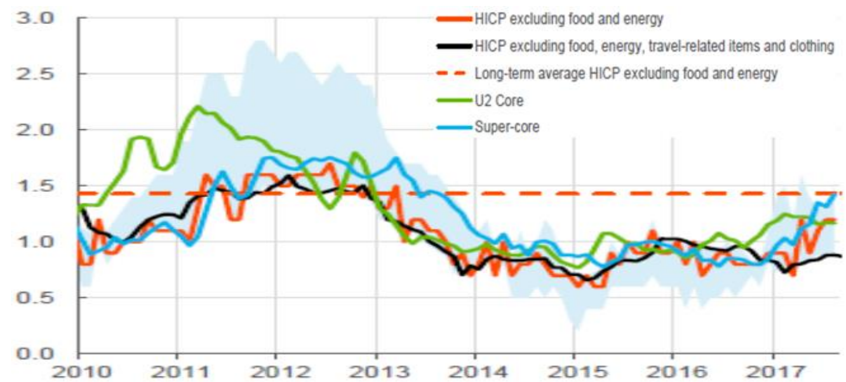
Sources: Haver Analytics and Citi Research

Our economists looked at trend inflation measures in Alert: Euro Economics Flash - Core Inflation Softens, GDP Growth Remains Strong, and see measures like trimmed-mean and median HICP as still inferring that the core inflation trajectory is heading gently higher - and this is consistent with our view of mildly higher core rates.

An interesting steer on inflation trends was observed in a September speech by Peter Praet which showcased some non-public ECB calculations on core inflation. Figure 14 copies the key chart. There are three chart lines of interest.

The most mundane is the average core HICP line, which stands at 1.4% over period of Praet's analysis. In the pre-crisis era core HICP averaged 1.6%, so well below 2%. The basic but powerful point is that a super-cycle of China growth, commodities inflation, and periphery bubbles were needed to lift to the headline HICP to 2%.

Figure 14. The ECB's measures of underlying inflation (annual % changes).



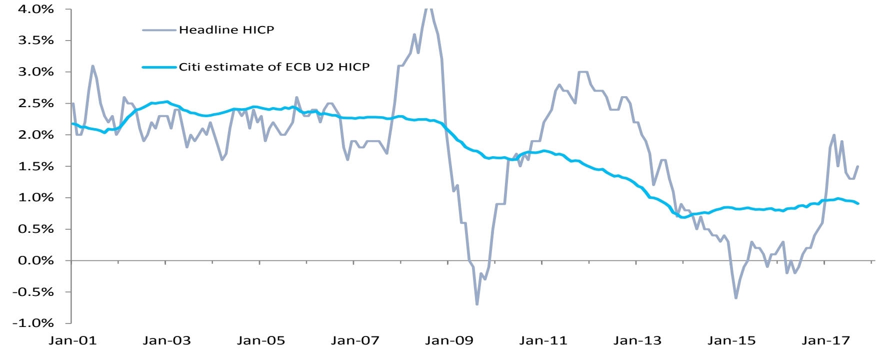
Source: ECB, Citi Research *Speech by Peter Praet, 'The ECB asset purchase programme and European financial markets'. **Note: The dynamic factor model (U2 Core) is based on the full 93 HICP items from each of 12 countries. Super-core is based only on those items in HICP excluding food and energy that are sensitive to slack as measured by the output gap. The range includes exclusion-based measures, trimmed means and a weighted median. Latest observation: August 2017.

Otherwise, it is interesting to note that the ECB's super-core measure and the U2 Core measure are showing more favorable inflation trends.

As mentioned, the ECB does not publish these measures, so what should markets make of these signals? We have our own measures to replicate or assess the ECB toolkit, and the most fruitful versions are based on dynamic factors models.

Figure 15 shows a version of the ECB U2 Core. Our measure has less granularity on HICP basket items (38 items in the model instead of the full 93 items used by the ECB). The point of these statistical tools is to identify the underlying inflation trend rather than rely only on measures of ex-energy/food inflation. Based on Figure 15 there seems to be little change in trend inflation.

Figure 15. Dynamic factor model in the spirit of Peter Prate's U2 Core measure - we see no shift in trend inflation here.

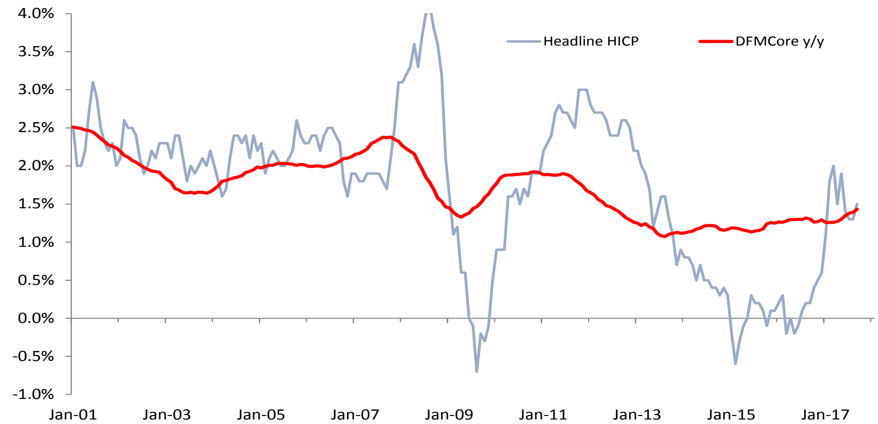


Source: Citi Research

Another model that the ECB showcased in the past (see, Jul-15 ECB Economic Bulletin, Box 4) looked at core HICP and at the time the ECB was wondering whether core inflation was on the cusp of a turning point. This model is of particular interest because it tends to lead core inflation by 6 months.

Our replication exercise exactly followed the ECB methodology, parameter specifications and dataset, and is described in European Rates Focus: Peaky headline and dormant core inflation. The latest reading is shown in Figure 16 and shows a gentle uptrend in inflation is indeed underway.

Figure 16. Dynamic factor model on core inflation



Source: Citi Research

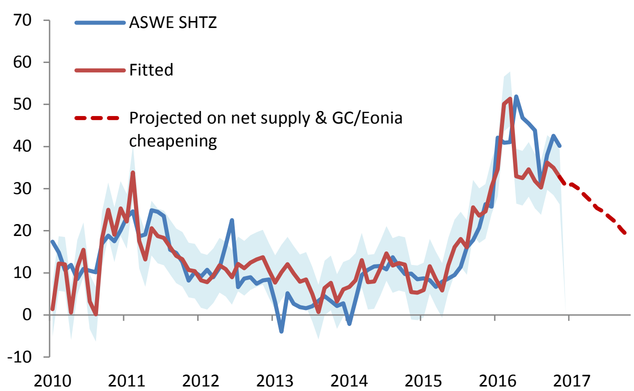
- **Net, the takeaways are that low inflation and unanchoring should be the baseline not a surprise. That does not rule out an inflation cycle even if at lower levels and here we see the recent core HICP downside surprises as correcting over exuberant Apr-Aug prints against a backdrop of gently higher core trends. This is corroborated by our replication studies of ECB models designed to lead core inflation.**

3. ASWE trends on taper: flows and stocks

What is the outlook for German ASWE (versus Eonia) as the ECB tapers in 2018? We think ASWE across the German futures basket should cheapen but not return to the cheapness prior to the QE announcement which had seen Bunds trade above Eonia.

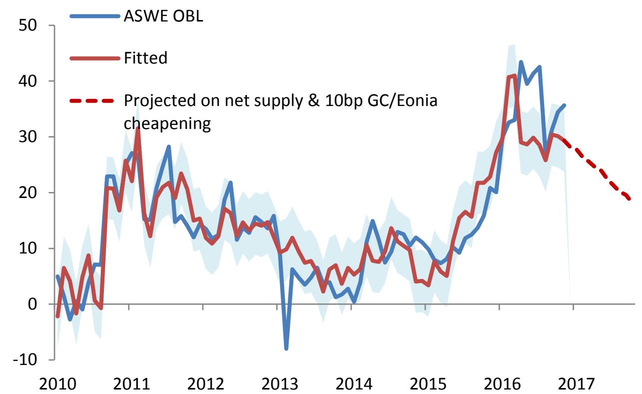
In Figure 17 to Figure 20 we show a model of swap spreads to Eonia for the German futures. The models are regressions against Vol, BTP/Bund spread (to capture crisis dynamics), Itraxx, a smoothed German GC/Eonia basis and finally the net 10yr equivalent German supply, which is defined as gross supply minus ECB purchases.

Figure 17. ASWE Schatz contract model*



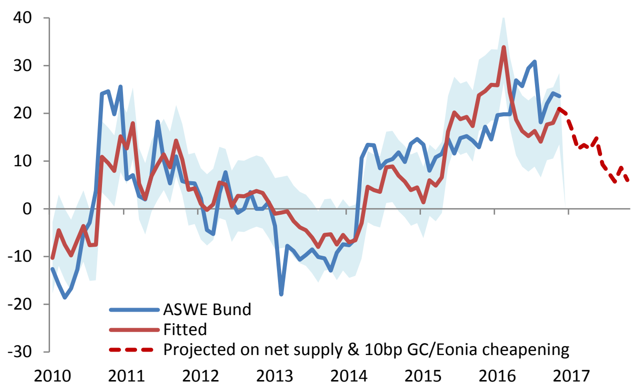
Source: Citi Research, Bloomberg *regression from Dec10- against vol, BTP/Bund, Itraxx , smoothed GC/Eonia and 10yr equivalent net supply ex-ECB.

Figure 18. ASWE Bobl contract model*



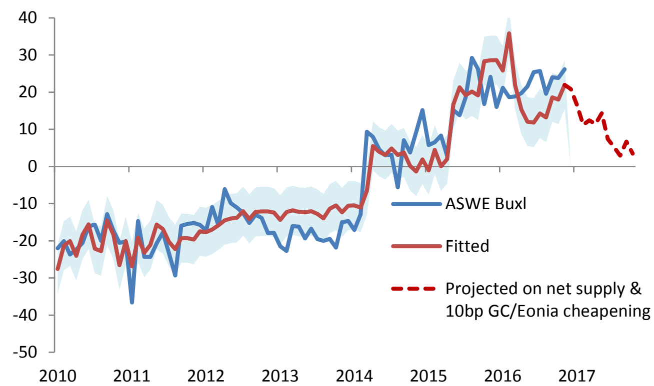
Source: Citi Research, Bloomberg *regression from Dec10- against vol, BTP/Bund, Itraxx , smoothed GC/Eonia and 10yr equivalent net supply ex-ECB.

Figure 19. ASWE Bund contract model*



Source: Citi Research, Bloomberg *regression from Dec10- against vol, BTP/Bund, Itraxx , smoothed GC/Eonia and 10yr equivalent net supply ex-ECB.

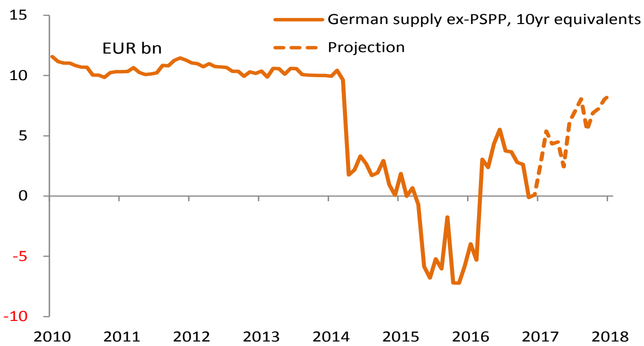
Figure 20. ASWE Buxl contract model*



Source: Citi Research, Bloomberg *regression from Dec10- against vol, BTP/Bund, Itraxx , smoothed GC/Eonia and 10yr equivalent net supply ex-ECB.

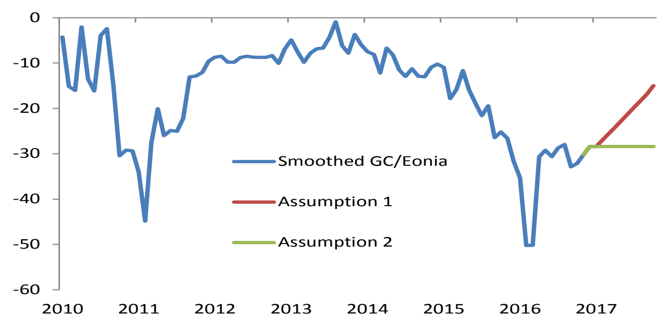
As can be seen, the forecast is for general cheapening. The assumptions in the projections are unchanged levels for all variables except (a) the 10yr German net supply variable and (b) the GC/Eonia variable where we pencil in a cumulative 13bp cheapening to Sep18.

Figure 21. German 10yr equivalent supply ex-ECB



Source: Citi Research

Figure 22. What if the stock of debt is more material – an alternative scenario for GC/Eonia is to assume stable not cheaper levels.



Source: Citi Research

The 10yr net supply outlook is shown in Figure 21 and is based on our expectation that EGB PSPP will be €15bn next year. We use our ECB buying model to factor in reinvestments. The ECB on 6th November will publish colour on redemptions and this may see some (likely modest[3]) shifts in this FLOW measure.

The more notable assumption is our view that GC/Eonia will cheapen by 13bp. As Figure 22 shows, this assumption would take levels back to the early QE period and not the cheaper levels that existed prior to QE speculation. What if the STOCK effects are more profound? To cover this scenario, we ran projections again but this time assuming that GC/Eonia is static. Figure 23 shows the results of both scenarios.

Figure 23. Flow versus stock – how valuations shift if GC/Eonia is static even on ECB taper

How much do model ASWE fitted value cheapen to Sep18?		
	Assumption #1 GC/Eonia cheapens 13bp to Sep18	Assumption #2 GC/Eonia static on QE stock effect
Schatz ASWE	11.9	1.1
Bobl ASWE	10.0	1.0
Bund ASWE	14.0	11.1
Buxl ASWE	17.4	13.0

Source: Citi Research

- The takeaway is that on our baseline of net supply and some cheapening in GC/Eonia, that there is a cheapening on the ASWE. The cheapening in 2y and 5y is broadly similar but the general trend is that the lower duration extraction by the ECB produces a reversal of the incoming QE effect where now longer dated bonds cheapen most to the Eonia curve.

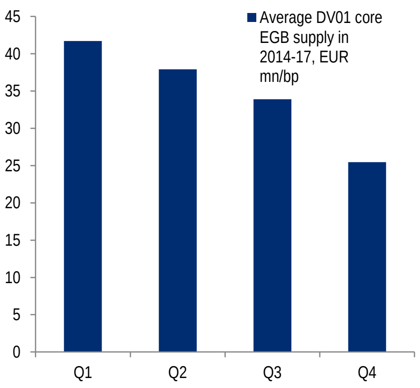
- This relative cheapening of the long end stands in the Stock effect scenario (\2) where we hold GC/Eonia steady. In that case the change in 2y and 5y ASWE is marginal but the long end still cheapens.

Monetizing the trade

The model results both on our baseline view and a static GC/Eonia (where the stock effect keeps German bond repo at current expensive levels) infer a possible trend-wise long-end cheapening trade for 2018. This is not how we would use the analysis. For one, we have a smooth cheapening in GC/Eonia on our baseline, which gives a false impression of what is likely to be an erratic shift.

[3] The ECB may not provide country level redemptions on PSPP but has committed to monthly redemptions on the PSPP, CSPP, CBPP3, ABSPP.

Figure 24. Average DV01 core EGB supply in 2014-17, EUR mn/bp



Source: Citi Research

More importantly, ASWE cheapening trades have to fight forward cheapness and Figure 25 shows that a pro-rata roll across the next four contracts exhausts much of the cheapness that we expect to emerge.

- That is, ASW cheapening is more tactical than meets the eye owing to roll.

Figure 25. Future rolls in ASW*

Futures ASW (bp)	ASW v Eonia Front	ASW v Eonia Back	ASW v Eonia Roll	ASW v 3s Front	ASW v 3s Back	ASW v 3s Roll	ASW v 6s Front	ASW v 6s Back	ASW v 6s Roll
Schatz	-43.6	-39.4	-4.2	-48.4	-45.0	-3.4	-54.5	-51.6	-2.9
Obl	-38.5	-33.4	-5.1	-47.4	-42.9	-4.5	-56.8	-52.8	-4.0
Bund	-27.7	-24.1	-3.6	-38.7	-35.5	-3.2	-48.8	-45.6	-3.1
Buxl	-26.9	-26.1	-0.8	-37.0	-36.3	-0.7	-42.7	-42.0	-0.7

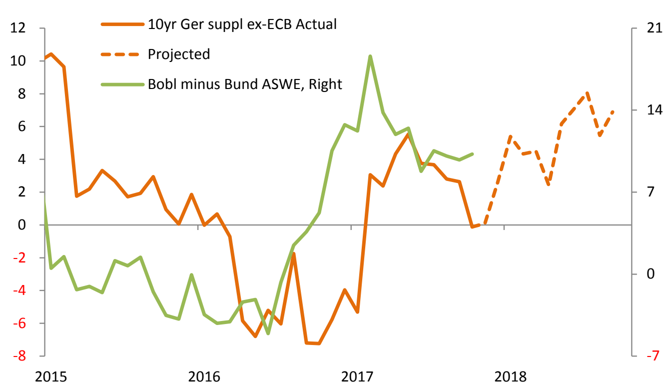
Source: Citi Research, Bloomberg. *Schatz roll based on theoretical new BKO 0% Dec19 issue. As of 16.00 GMT 02-Nov-17.

That doesn't mean that there are no trades – and in fact *we would like to head into 2018 with cheapening trades in Bunds and Buxl* on the expectation of

- – Heavy duration of core issuance, as sovereigns term out debt in the last year of QE, will weigh;
- – The reported strategic payer of swaps paying recedes next year and with EUR 15y15y near 2% there may conversely be some ALM demand.

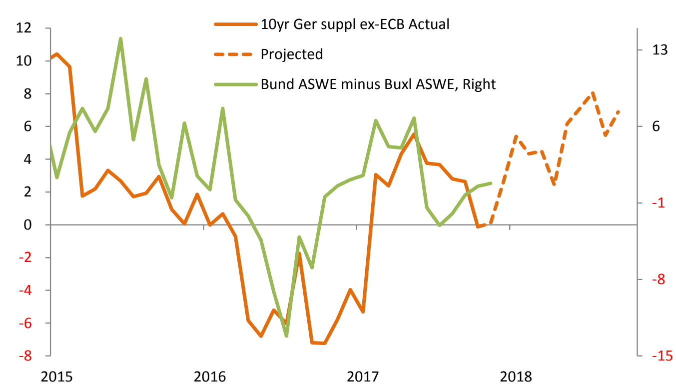
The strongest trade inference remains on the ASW curve as highlighted by the results of Figure 25. That suggested longer maturities would be more influenced by flow even in a scenario of large stock effects.

Figure 26. Supply versus Bobl/Bund box



Source: Citi Research

Figure 27. Supply versus Bund/Buxl box



Source: Citi Research

Figure 26 shows the relationship between supply and the Bobl/Bund ASWE box. The historical relationship is distorted by the implementation and then removal of the depo buying floor under PSPP in Jan16 (where OBLs could then be bought).

- The relationship is cleaner in the Bund/Buxl box (Figure 27) and points to the box trades as having strategic value. We are looking for better entry levels in these trades and are mindful of an expected maturity extension in German buying into year end, which effectively means the squeeze risk is this month.

UK - MPC hike without conviction

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The MPC delivered the well-flagged 25bp hike, but surprised the market by removing the guidance that said rates may need to rise by a *"greater extent"* than priced. That made the first rate hike in over 10 years dovish for the market, and opposed our expectations for a hawkish surprise.

The MPC signaled that it will hike again (this is not one-and-done), but not any time soon. The market implied path of a further two hikes over the next three years was seen as acceptable, somewhat surprisingly in our view. However, even though the market was encouraged to price a very slow path for policy rates, the MPC also made it clear that it would be proactive in adjusting policy, particularly in relation to Brexit developments.

The 2s10s gilt curve was little changed today and we are inclined to stick with flatteners for the medium-term. Even if the MPC was dovish today, perhaps inadvertently, the policy bias is now for tightening and the bar to further hikes has been lowered by the reduction in potential growth. The MPC may also need to push back against the market reaction. In the long-end, yields are likely to be capped by Brexit uncertainty and concerns of policy error.

Dovish despite +25bp

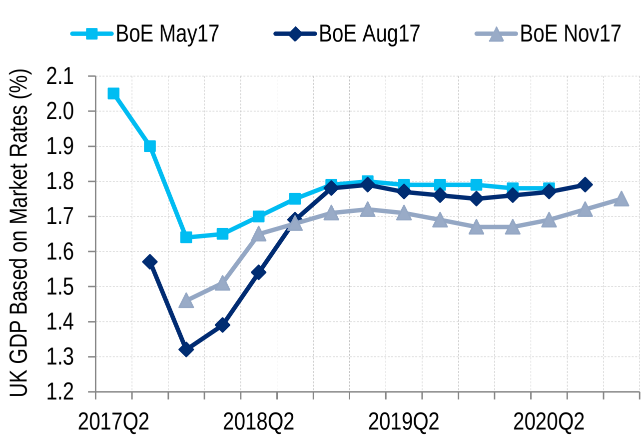
With the rate hike almost fully priced, the market reaction today was always most likely to be driven by the updated guidance with respect to market pricing. The last policy summary in September, which set up the rate hike, stated that all members thought rates might rise by a *"greater extent"* than priced and that a majority thought a hike may be need in the *"coming months"*.

Removing just the time guidance contained in the latter would have made today's hike neutral vs expectations in our view (as discussed here). But, by also taking out *"greater extent"*, **the MPC removed all hawkish signaling** and made today a dovish outcome. The rationale for doing this is not clear to us given the MPC has been intent on pushing the market path higher in recent months.

The vote split at 7-2 was not hugely surprising, but does mean that the **vote to hike was carried by the external members** (four of the seven).

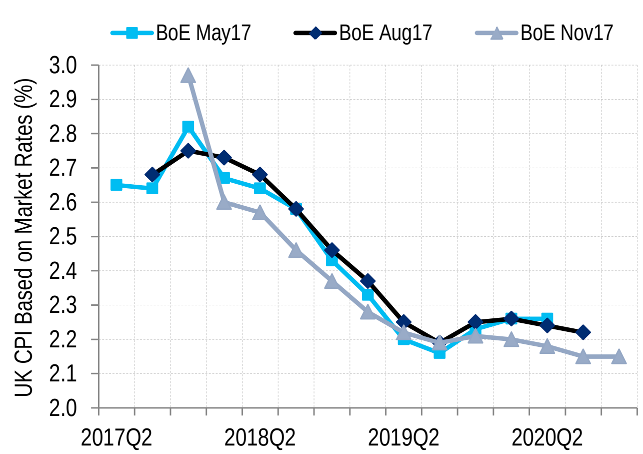
The new forecasts for growth and inflation – based on a more hawkish rate profile vs August – are shown in the charts below.

Figure 28. BoE Inflation Report – growth projections



Source: Citi Research, BoE.

Figure 29. BoE Inflation Report – inflation projections



Source: Citi Research, BoE.

The growth outlook was revised up in the near-quarters, but down in back-quarters (Figure 28). **Growth was judged to be running just above the potential rate** (see below). Inflation was revised up in the very near-term, but was revised a little closer to target further out, but crucially remains above it (Figure 29).

Turns out 'greater extent' is not very great

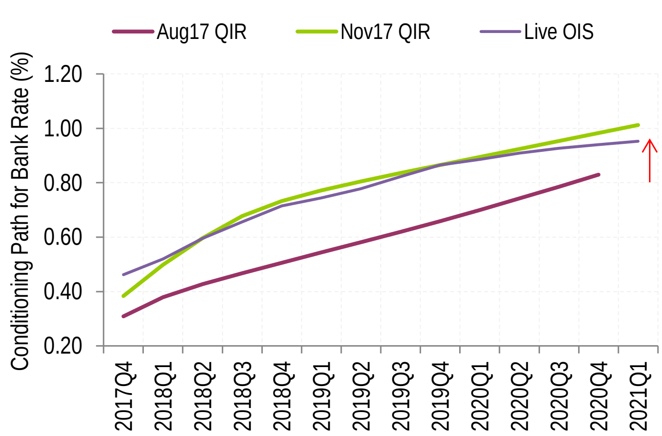
The MPC has tried to signal that this is not one-and-done, but also that it is in no rush to tighten further. The former is made clear by the forecasts based on unchanged policy rates which show inflation around 2.4% in the far-quarters, uncomfortably above target. The latter comes from guidance.

The curiosity for us is that the MPC protested in August against a market implied path for policy rates which reached 0.83% at the end of the forecast horizon. It went on to signal, and then deliver, a rate hike. But, the new market implied path – which the MPC appears comfortable with – only gets to 1.01%.

The small change in the market path seems like a poor return from the first rate hike in 10 years, especially given the risk of policy error. The MPC has gone to a lot of effort for a mere 18bp. And the market reaction since the announcement means that the 18bp is now just 13bp (Figure 30).

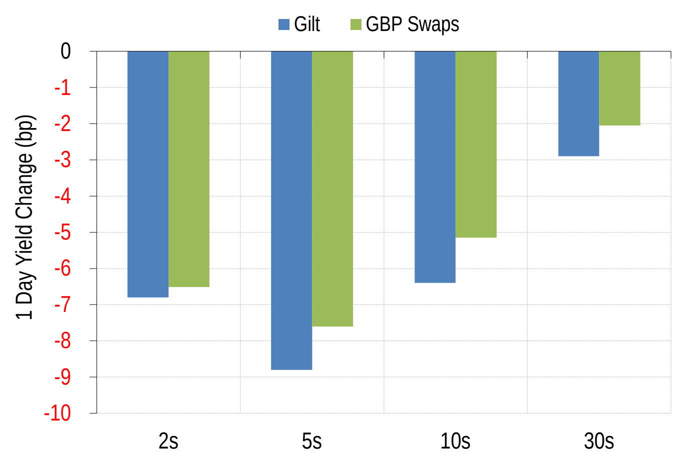
Further out, the rally was driven by 5s (Figure 31).

Figure 30. Re-pricing of the market implied path for Bank Rate



Source: Citi Research, BoE. As of close 2Nov17.

Figure 31. Today's reaction



Source: Citi Research, Bloomberg. As of close 2Nov17.

Lower bar for the next hike

The rally today is probably not what the MPC was hoping for. But, the market reaction is fair in our view. By removing the *"greater extent"* guidance the MPC has given the impression, inadvertently or otherwise, that it is in no rush to lower the end-point of the inflation profile closer to target. That might mean that MPC hawks push back against the dovish reaction in the coming weeks.

The lesson from this year is that the market would only listen if the MPC essentially promised a hike. And even then, the curve is little changed because of it. **The message today gave the impression that the MPC has low conviction in even a slow cycle - it might take a second hike to disprove this.**

Today's dovish reaction might even make an earlier second hike more likely. Otherwise, rates may fall further and, crucially, sterling could continue to weaken.

It was made clear today that one reason for hiking was to ensure that the real income squeeze comes to an end. That squeeze was mainly driven by weaker sterling. **Carney didn't say it, but the implication is that the MPC hope that the hike will support the currency – that certainly didn't work today.**

The focus on lower potential growth also lowers the bar to another hike. The Inflation Report makes the somewhat bold assertion that potential growth is now just 1.5%. It goes on to explain that recent growth has been driven by increased labour supply, not productivity growth. Labour supply is unlikely to make as much of a contribution in future and therefore growth is likely to be lower.

This new assessment allows the MPC to hike with modest growth projections of around 1.7% (Figure 28). It also means **any upside growth surprises from here should trigger a second hike.**

View – front-end vulnerable

The front-end looks vulnerable after today's rally in our view. **The 2yr gilt yield is back below Bank Rate following the hike** (Figure 32). The MPC is unlikely to be comfortable with this given their tightening bias. Dovish pricing in the market may actually force the MPC to hike again, as perhaps it did for this first hike, or else suffer further currency-related inflation. The new estimate for potential growth also lowers the bar to further rate hikes.

That makes the front-end vulnerable given how little is still priced in. Any positive Brexit developments would also create space for a quicker cycle. But, if a cliff-edge looms then the curve is likely to bull-flatten as more QE is likely to be priced. Long-end yields are also likely to be capped by fears of policy error.

The medium-term risk-reward is still with 2s10s gilt flatteners in our view (Figure 33). Our target is 70bp with a stop at 94bp (see Recommended trades for details). One risk is that international drivers lift long-end yields everywhere.

Figure 32. 2yr gilt yield is below the new Bank Rate

Source: Citi Research, Bloomberg. As of close 2Nov17.

Figure 33. 2s10s gilt curve can flatten further in our view

Source: Citi Research, Bloomberg. As of close 2Nov17.

Various boosts to EGB spread tightening

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Periphery spreads have recently received various boosts in the tightening trend. Following the dovish twists in last week's ECB, S&P unexpectedly upgraded Italy from BBB- *stable* to BBB stable on Friday. Together with a poll showing support falling slightly for pro-independence forces in Catalonia and a likely squeeze in ECB PSPP in Q4, we believe many factors are helping to buoy the periphery tone for now. We continue to believe political risks may weigh on the market in early 2018, but for now, a grind tighter looks like the path of least resistance.

BTPs outperforming – constructive Q4 for EGB spreads

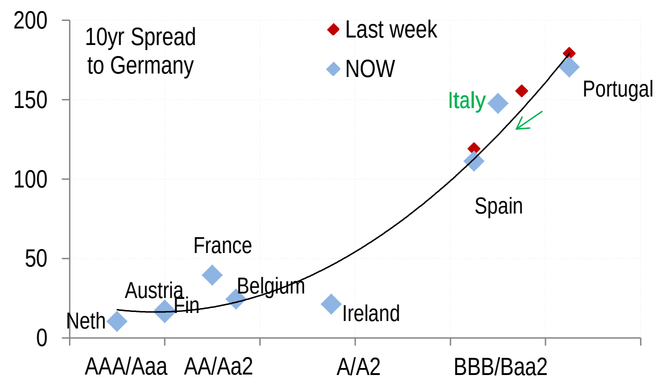
10yr BTP-Bunds and 10yr Bono-Bunds closed 8bp and 7bp tighter respectively on Monday. While perceived reductions in political risks in Spain are supportive, we believe the current periphery setting is multifaceted: it is the combination of forces that means the bullish impetus is likely to remain for the near-term in our view.

- **Italian upgrade by S&P:** In an unexpected move by S&P, the rating agency upgraded Italy from BBB- (Stable) to BBB (Stable) last week. This brings its rating in line with Moody's (Baa2, albeit Moody's carries a negative outlook). This was the first upgrade by S&P in more than 20 years, dictated by the improving economic recovery. For the market, this further supports a flattening of the EGB credit curve. As shown in Figure 34, Italy now moves down the fitted line. In our view, this further supports the EGB spread market and helps justify BTP outperformance (Figure 35).

- **Catalonia polls and evolving perceived political risks:** Despite the declaration of independence by Catalonia and the invocation of A155 by Madrid, 10yr Bono-spreads closed a mere 7bp wider on Friday. This was largely reversed on Monday as perceptions of Spanish political risk lessened. This supportive tone was further underlined by Puigdemont's comment in Belgium that pro-independence parties will participate in the elections called by Madrid for 21st December. Much of the focus will now rest on campaigning, and a recent poll also indicated that pro-independent parties are projected to fail to obtain a majority (*Europe - Sovereign Debt Update*).

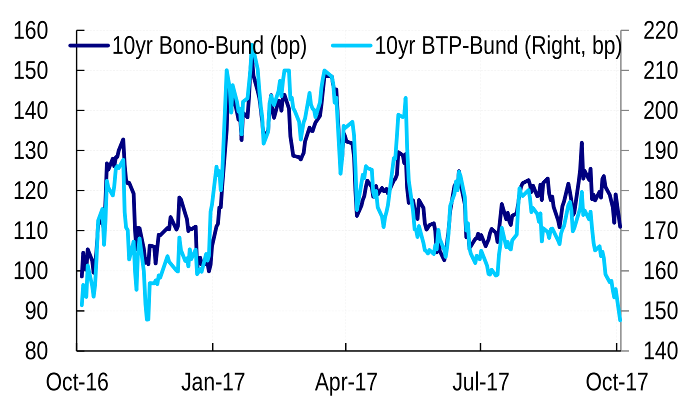
- **ECB PSPP squeeze into year-end:** We have also detailed the tendency for ECB PSPP to "front-load" ahead of the lull in December. Indeed, the latest weekly QE data indicate that total buying of October has already reached an above-target amount at €60.46bn. Together with waning supply in Q4, technicals also paint a supportive picture in the weeks ahead (*European Rates Week*).

Figure 34. EGB credit curve (10yr spreads to average rating)



Source: Citi Research, Close 31st October 2017

Figure 35. 10yr BTP-Bunds outperforming and near YTD tights (bp)



Source: Citi Research, Close 31st October 2017

Risk factors

Balancing such supportive drivers, it is a set of political risk factors that are potentially bearish in our framework. We would highlight the following:

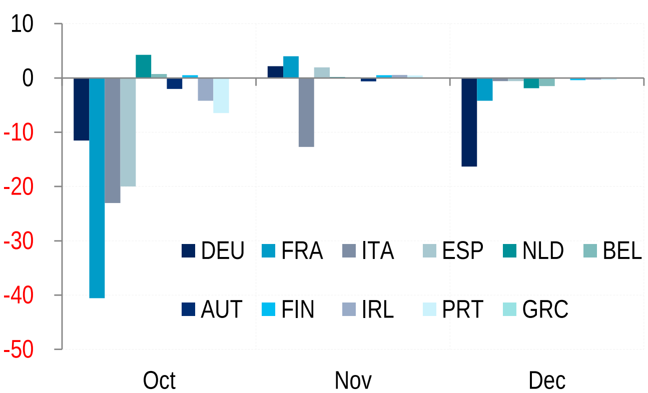
- **Sicilian regional election 5th November:** A regional election in Sicily takes place this coming weekend in what will likely act as a signpost for the state of support for M5S and the right wing block. As our economists note, predicting the seat distribution at the national level (with the Italian election likely in Q1 2018) is very difficult because of the new *Rosatellum* electoral law (there is no polling history for the "first past the post" seats). However, a recent IPSOS poll indicated that only a "grand coalition" or an anti-establishment alliance of M5S and Lega Nord could reach a majority (*Europe - Sovereign Debt Update*). With this in mind, the BTP market will likely scrutinize the Sicilian election outlook for clues as to how such parties are actually faring with voters. Come what may, we continue to believe elevated headline risk in Q1 next year is a driver likely to weigh on the BTP spread tone – but again, this looks increasingly to be a theme for 2018.

- **Markets underpricing certain Catalonia election outcomes:** Another risk scenario would be a stronger showing of the pro-independent forces at the regional Catalonia election on 21st December. Although this is not currently indicated in recent polls, as our economists note, voting preferences could shift in the coming days and weeks and in turn undermine the current bullish tone (*Europe - Sovereign Debt Update*).

Net conclusions

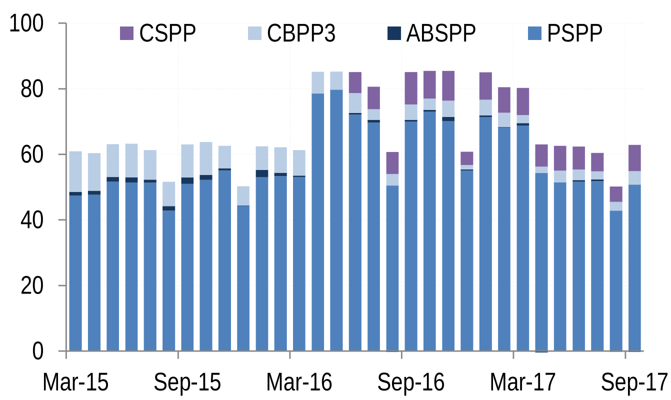
Near-term constructive: As detailed in our latest *European Rates Weekly: The nuances of the ECB delivery*, we believe the near-term, on balance, spread outlook has become more benign. The ECB had various dovish twists to underpin a supportive spread tone, and the Bono market is largely shrugging off the Catalonia event risk. Combined with favourable upcoming net supply dynamics (Figure 36) and ongoing QE at €60bn (with front-loading ahead of December, Figure 37), a grind tighter appears the path of least resistance for now.

Figure 36. Upcoming NCRs (€bn)



Source: Citi Research, DMOs

Figure 37. Net QE by programme (€bn)



Source: Citi Research, Bloomberg

€inflation: Net supply to decline in 2018

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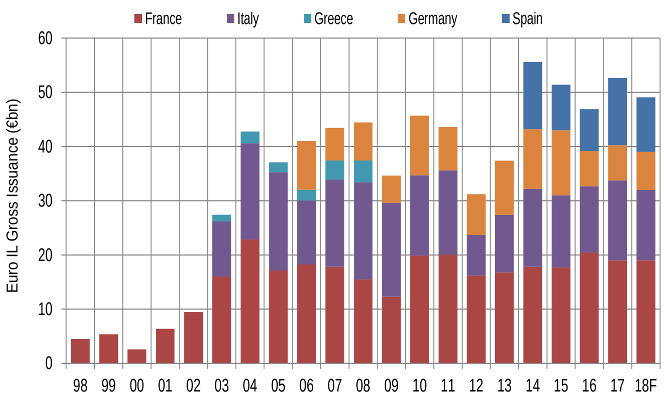
We expect euro area inflation-linked gross supply to dip slightly to €49bn in 2018 from €53bn expected in 2017. However, supply should decline more in net terms (gross supply - redemptions), as redemptions increase to an all-time high of €37bn (including inflation uplift).

2018 supply projected to decline slightly

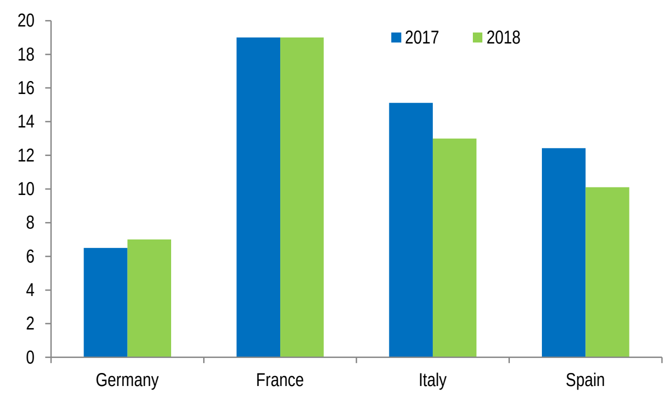
We expect euro inflation-linked supply in 2018 at around €49bn, €4bn lower than €53bn expected in 2017 (Figure 38). Including BTP Italia, we expect total supply of around €57bn in 2018, down from €70bn expected in 2017. Figure 39 shows that all of this reduction comes in periphery.

Figure 38. Gross issuance of linkers



Source: Citi Research, DMOs

Figure 39. Gross supply projected for 2018 vs 2017

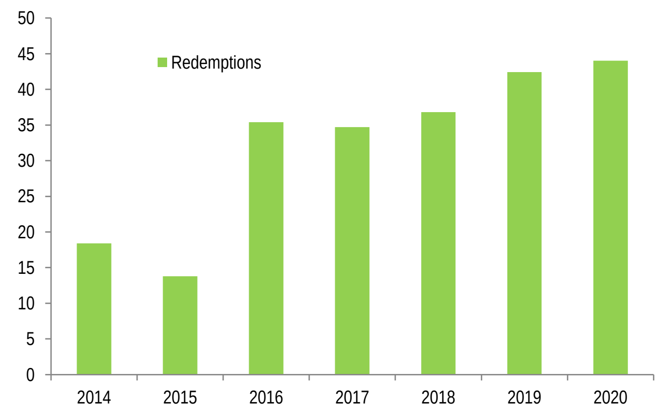


Source: Citi Research, DMOs.

Small net supply for market to digest

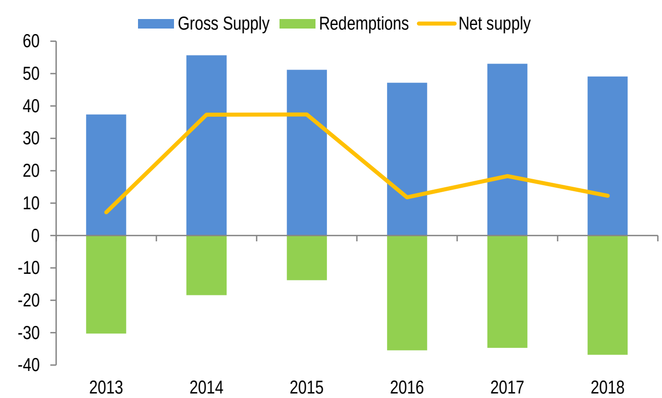
Euro linker redemptions are set to nudge higher over coming years (Figure 40). For 2018, the three maturing bonds from Germany (Boblei18), France (OATei18) and Italy (BTPei18) will take total redemptions to €37bn (including inflation uplift), an all-time high total. This is likely to further increase in 2019-2020 to around €42-44bn annually. The increase in redemptions would result in a small net supply (gross supply - redemptions) of just around €12bn in 2018. This would mark a €6bn reduction from €18bn expected in 2017, and is closer to the lowest net supply of €11.8bn over the last four years (Figure 41).

Figure 40. Redemptions on the up



Source: Citi Research, DMOs. Using Citi inflation forecasts for future inflation uplift.

Figure 41. Net issuance projected to dip slightly in 2018



Source: Citi Research, DMOs.

Country level supply projections

- **Germany (€7bn):** Bundei supply in 2016 was just €6.5bn, the lowest since 2009. 2017 looks on track to match this size, which would be close to the lower end of the indicative range of €6-10bn. The small funding in linkers could have been driven by (1) the lack of structural demand for inflation due to low realized inflation and deflationary concerns, (2) The lack of the need to issue a new linker, as there was enough capacity in existing bonds. There is no change in these factors so far – average b/c for Bundei auctions has remained unchanged YTD vs 2016 average, at around 1.3x (adjusted for amount retained). Also, Germany has enough buffer in the currently open lines – Bundei26, ei30 and ei46 – to comfortably go through 2018 without any new launch. In the absence of any new bond, annual supply might stay in line with 2017 at around €7bn. If the Finanzagentur does decide to issue a new bond, there is space in the 5yr sector (Germany was the only issuer to not launch a new 5yr in 2016), but the largest gap on the curve is between Bundei30 and ei46.

- **France (€19bn):** France typically looks to issue approximately 10% of the annual net issuance in inflation-linked securities. After falling short of this target for a few years, the AFT has been matching it since 2016. This drives our 2018 issuance expectation of around €19bn (total medium-long term issuance has been announced at €195bn for 2018, net of buybacks).

  In terms of new issues, a new 10yr OATei looks likely as OATei27 approaches a size where the AFT typically pauses further re-openings, but a new OATei35 is also possible based on gaps in the curve.

- **Spain (€10bn):** Spain is the only euro issuer to issue in August and December, albeit its average auction size is the smallest among the four issuers. For 2018, we expect total supply of around €10bn, slightly less than €12.4bn expected for 2017. This is driven by the expectation of a new issue (15yr, as discussed below) which should be smaller in size than the €5bn launch of new 10yr in 2017.

  To assess the possibility of a new SPGBei in 2018, we note that Spain has issued at least one new linker since debuting in the inflation-linked space in 2014. Over recent years, Spain has tended to issue new benchmarks in the 5yr, 10yr and 15yr sectors when the existing bond has shortened in remaining life. On this basis, 2018 could see a new 15yr SPGBei - as SPGBei30 declines to 13 years of residual life - thereby extending the real yield curve.

- **Italy (€13bn BTPei + €8-10bn BTP Italia):** The Tesoro has kept the BTPei share of total issuance largely stable at around 5.7% over recent years (Figure 42). As the overall funding need of the sovereign is likely to decrease in 2018, with both budget deficit and redemptions declining compared to 2017, this calls for a lower BTPei issuance at around €13bn in 2018 vs €14.7bn expected in 2017.

  In terms of new issues, Italy has issued at least one new BTPei since 2013. The biggest gap in the curve is currently in the 20yr sector (between BTPei35 and BTPei41) and a new issue could boost liquidity of the sector characterized by two relatively illiquid bonds. Alternatively, the Tesoro could decide to extend the real yield curve with a new 30yr.

Will more Italia be issued despite no redemptions?

The last three tranches of BTP Italia have coincided with large redemptions (Figure 43). The Tesoro has announced another tranche to be issued over 13-16 November, which also comes days after the redemption of BTP Italia Nov17 on 12

November, worth €18bn. This is in line with the Tesoro's objective of "*offering the possibility of reinvesting in the new securities the principal paid out in 2017*".

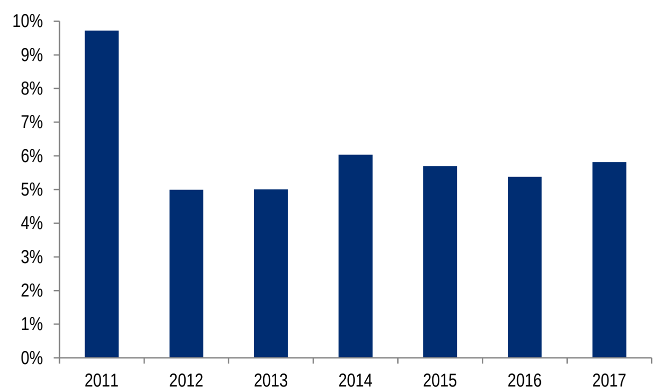
Looking ahead, after the upcoming redemption, the next Italia redemption is not due until 2020. However, we think the Tesoro will continue to issue new tranches of BTP Italia in 2018, based on the following reasoning:

- The Tesoro stated in their 2017 funding outlook[4] that "*the accent is on continuing to supply retail investors with an instrument to protect their savings*". This rationale continues to hold in 2018. Furthermore, the Tesoro takes into consideration the overall exposure to inflation risk (across BTPei and BTP Italia) vs total debt, while formulating its funding strategy. With recent tranches of maturing Italia much bigger than new issues that replace them (Figure 43), there has been a decline in inflation exposure of the Tesoro. This could prompt new BTP Italia launches in 2018.

- BTP Italia could also help the Tesoro in achieving its funding target in 2018 in the event of market stress around the upcoming Italian election. Our economists expect the election to be announced for March/April 2018 and think that the far-right M5S is likely to get the maximum share of votes (*Italian Election Primer*).

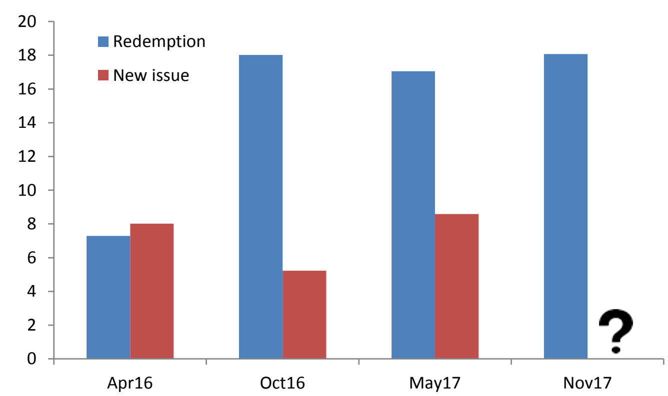
However, issuance volume of BTP Italia could decline next year due to the lack of any redemption support, to the €8-10bn range (from around €15-17bn likely in 2017). This depends on whether the Tesoro launches one tranche (of around €8bn) or two tranches (around €5bn each). In any case, 2018 looks likely to see the smallest annual BTP Italia issuance since the first launch in 2012.

Figure 42. Share of BTPei supply vs total Italian bond supply*



Source: Citi Research, Italian Tesoro. *across BTP, BTPei, CCTeu, CTZ.

Figure 43. Recent BTP Italia issuances vs coinciding redemptions (€bn)



Source: Citi Research, Italian Tesoro.

[4] 2017 Guidelines for public debt management from the Tesoro

Bearish medium-term plays via spread caps

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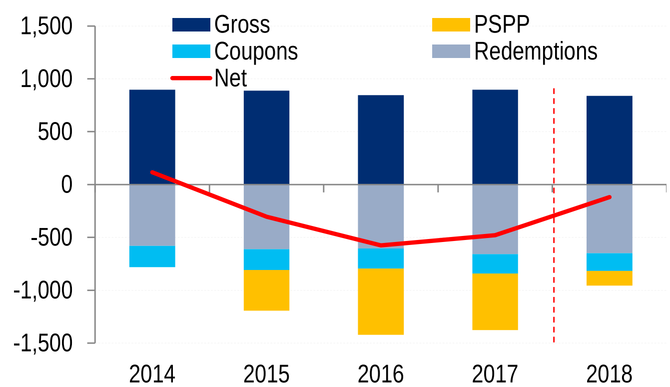
Forward guidance, higher net issuance and macro conditions argue for a steeper curve next year.

Exit sequencing, net supply dynamics, macro conditions and the curve

In the introductory statement last week Mario Draghi reiterated that the key ECB interest rates are expected “to remain at their present levels for an extended period of time, and well past the horizon” of the ECB asset purchases.

With regard to net supply dynamics, while it still will be negative in 2018, with much less PSPP it will be *less* negative: in one of our scenarios it increases from – EUR 478bn in 2017 to – EUR 118bn in 2018 (Figure 44). This is still negative and hence bond supportive all things being equal, it is just not as supportive as what markets have perhaps gotten used to.

Figure 44. Evolution of EMU-11 net supply dynamics (EUR bn)



Source: Citi Research

In the meantime Euro area composite PMI still points to above-trend growth. In particular, strong readings in the manufacturing PMI confirm that the manufacturing cycle is still leading the way in the recovery, reflecting positive international backdrop for Euro area exports but also the ongoing momentum in domestic investment.

As a result, the impact of tapering on the curve should, initially, be *relatively less pronounced on the front-end* than on the belly and the long-end. We plot the evolution of EUR swap 2s30s vs. EUR 2y swap in Figure 45.

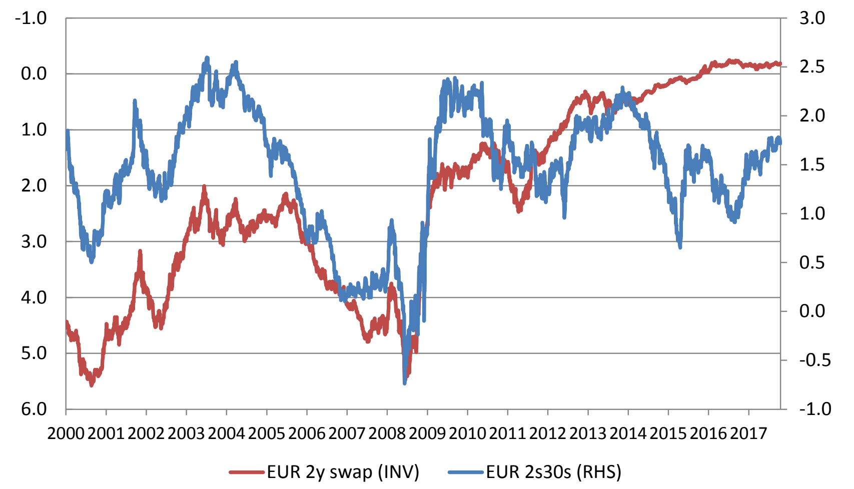
Unsurprisingly the curve exhibited strong directionality with the front-end in the early 2000s and between 2006 and 2013. In the following years, with policy rates at all-time lows, directionality *with the front-end* predictably disappeared.

Under the assumption that the ECB will keep policy rates on hold for the next couple of years, *the belly and the long-end* will trivially dictate the curve dynamics over such period of time.

Trading curve directionality with the belly of the curve via spread option caps

We show the evolution of EUR 2y 2s30s ATMF implied spread volatility in Figure 46. As shown, implied spread volatility is historically cheap. For example, a long position in EUR 2y 2s30s ATMF single look cap is currently offered at 21.5 cents (spot premium)[5].

Figure 45. Evolution of EUR 2s30s curve vs. EUR 2y swap



Source: Citi Research

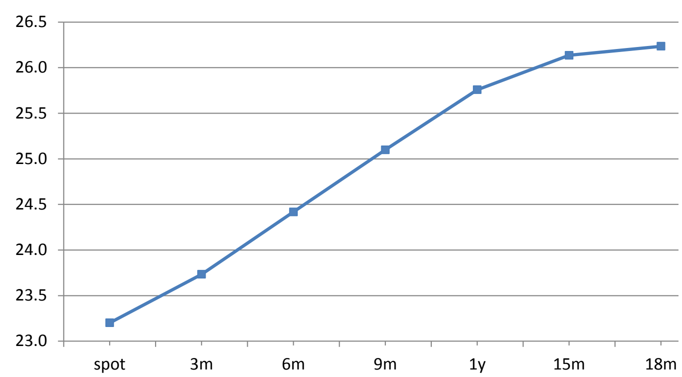
At expiry the cap breaks even if 2s30s trades at 1.69%, which is some 4bp below current spot curve. In other words, the structure already owns intrinsic value.

Indeed, an additional attractive feature of this strategy is the positive rolldown enjoyed by the option: in Figure 47 we compute the evolution of the option premium as it ages, assuming unchanged implied volatility and interest rate term structure.

Figure 46. Evolution of EUR 2y 2s30s ATMF implied spread volatility

Source: Citi Research

Figure 47. Evolution of rolldown for EUR 2y 2s30s ATMF single look cap (cents)



Source: Citi Research

Conclusion

We expect the curve to steepen further as ECB "tapers" next year while keeping conventional monetary policy fixed. Given the historically relatively elevated curve

[5] Price as of 31 October 2017 at 10:37am.

slope, however, we prefer expressing this view via spread options, given their limited downside and currently historically cheap prices.

The main risk to this strategy is the appearance of risk-off market sentiments, which would exert bull flattening pressure on the curve. The trade would also underperform as a result of unanticipated early rate hikes.

EFSF/ESM differentials going into 2018

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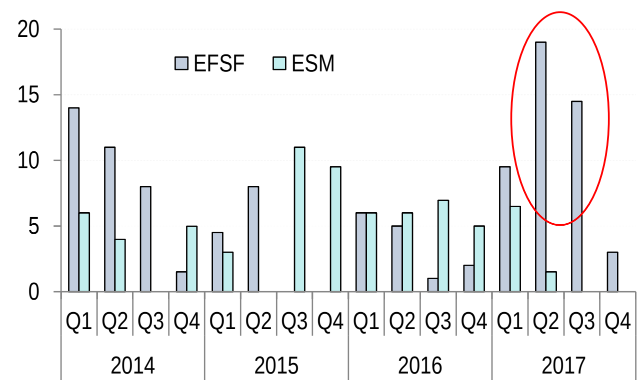
2017 has been characterized by a degree of single name spread differentiation not seen for many years. We believe relative supply dynamics help explain much of this dynamic between credits such as the EFSF/ESM. Recent spread behaviour has seen the EFSF rally hard and given the likely normalization of EFSF supply relative to ESM supply in 2018, we believe this is justified. We do not expect the EFSF to underperform in the near-term (*Riding the EFSF rally*).

Relative supply dynamics help unearth spread dynamics

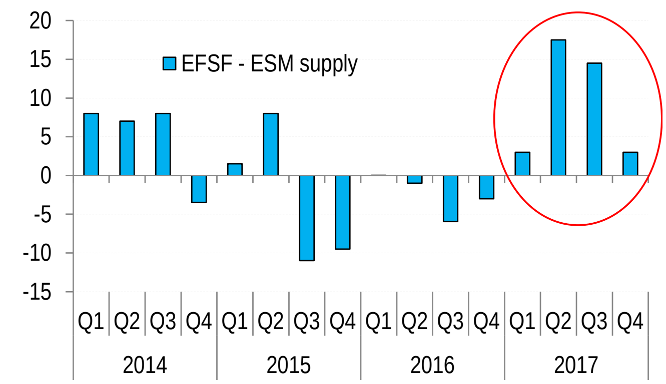
EFSF supply has surpassed ESM supply in each quarter of 2017: 2017 has seen a rise in EFSF supply with a total target volume of €40bn, outpacing the ESM's target of €12.5bn. In fact, this is the first year EFSF supply has been larger than ESM supply in every quarter (Figure 48, Figure 49).

Figure 48. Quarterly euro issuance of the EFSF and ESM (€bn)



Source: Citi Research, EFSF/ESM

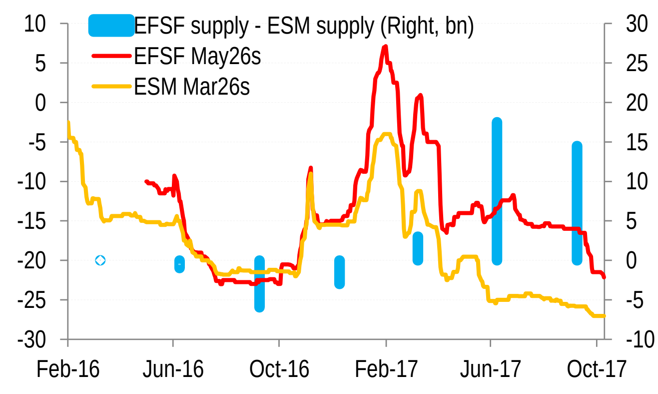
Figure 49. EFSF euro supply – ESM euro supply (Difference, €bn).



Source: Citi Research, EFSF/ESM

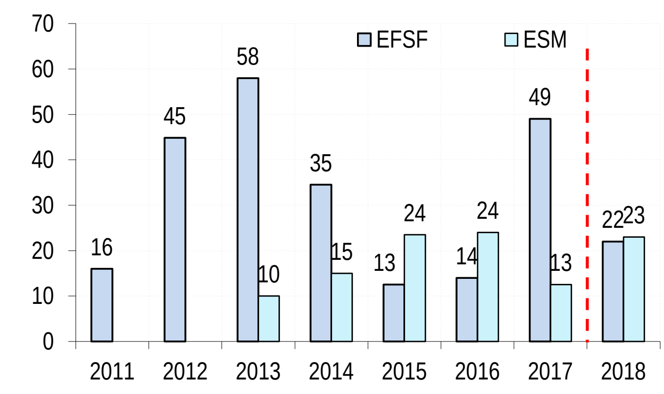
Mapping supply to spreads: We believe this rise in EFSF vs ESM supply helps explain much of the disconnection seen in EFSF spreads in 2017. This can be illustrated by mapping the supply difference to ASW levels (Figure 50). Furthermore, the completion of the vast majority of EFSF supply has now coincided with a strong outperformance of this credit, with spreads normalizing to the ESM (Figure 50).

Figure 50. ASW levels (bp) and EFSF supply - ESM supply (Diff, €bn)



Source: Citi Research, EFSF/ESM, Close 31st October 2017

Figure 51. Looking ahead EFSF/ESM supply normalizes in 2018 (€bn)



Source: Citi Research, EFSF/ESM Newsletter Factsheet June 2017, Preliminary stats

Supply dynamics imply ongoing normalization

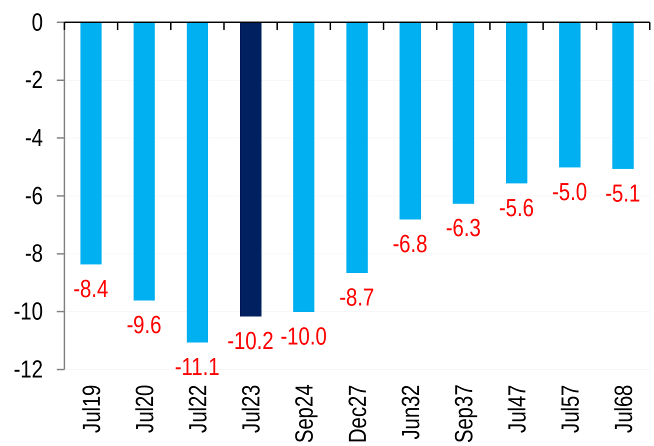
Looking ahead, EFSF and ESM supply volumes are set to normalize in 2018 (Figure 51). In fact, it will be the ESM that may have slightly more to issue next year (€23bn vs the EFSF's €22bn). As such, we believe the EFSF can continue to normalize to ESM spread levels over the near and medium-term.

Gilt auction preview – Jul23s next Thursday

Auction details: The UK DMO will issue £2.75bn of UKT 0.75% Treasury gilt 2023 next Thursday. The next re-opening of the bond is planned on 5th December 2017.

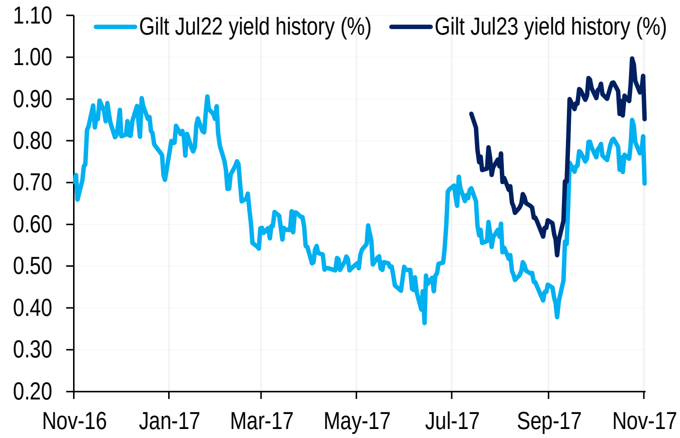
Front-end rally after a dovish BOE: 5yr gilts have led the rally today following a dovish rate hike by the MPC (Figure 52, see full discussion in the UK section). However, for the auction, the yield on offer (Figure 53) is still higher than at the time of the last auction.

Figure 52. Gilts have rallied since the rate hike (bp)



Source: Citi Research. As at 16:30 London time 2nd November 2017.

Figure 53. 5yr gilt yield history (%)

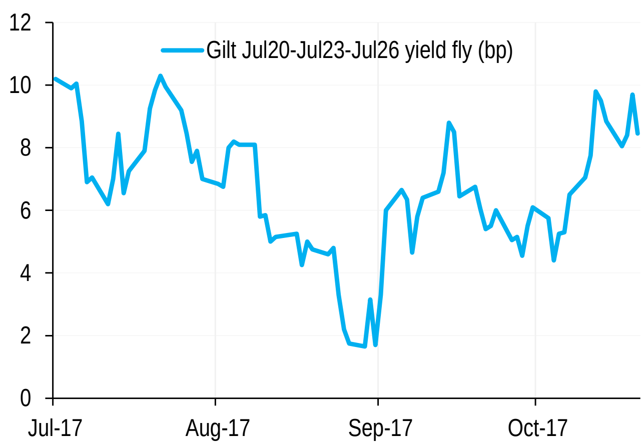


Source: Citi Research. As at 16:30 London time 2nd November 2017.

Relative value

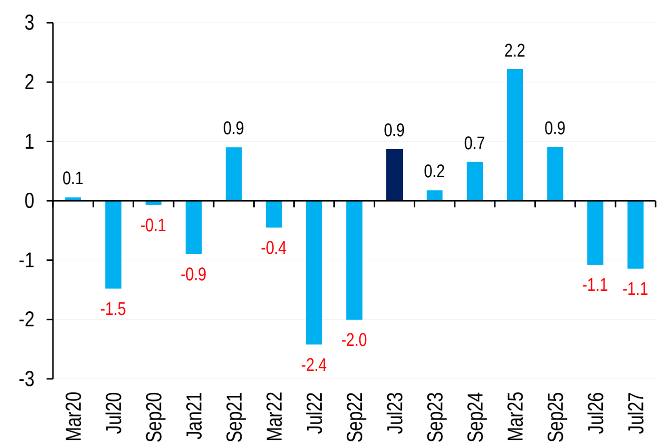
- **Cheapness on the curve:** Figure 54 shows the cheapness of the Jul20-Jul23-Jul26 yield fly. This cheapness should help generate interest at the auction.
  - **PCA confirms the cheapness:** As shown in Figure 55, Jul23s is trading cheap vs a PCA generated curve (6m z score of 1.1x), while both Jul20s and Jul26s are trading rich (z score of -1.5x and -1.4x respectively).

Figure 54. Jul23s cheap on the curve



Source: Citi Research. As at 16:30 London time 2nd November 2017.

Figure 55. 6m z scores of 3-10yr gilt spreads vs a PCA curve



Source: Citi Research. As at 16:30 London time 2nd November 2017.

Tradesheet

Recommended trades

Figure 56. Open trades

Trade	Entry Date	Entry level	Live[1]	MTM Level[2]	Target	Stop	Carry 3m (bp)	PnL (bp)	Reasonable basis and risks
Sell RAGB Sep21 vs Bund Sep21	12-Oct-17	11	9	9	23	5	-1	-2	Lack of supply and upcoming Austrian election as an event risk. Risk: Sharp sell-off in more liquid Bund / unexpected upgrade of Austria.
1x2 Rec spread on € 3y1y (ATMF/-36bp) - Target/stop in PnL terms	5-Oct-17	0	-1	-1	15	-7.5		-1	Tactically short front end € rates. Risk: Global economic shock that motivates rate cut expectations.
Sell Bundei46 real yield	21-Sep-17	-0.30%	-0.37%	-0.37%	0.00%	-0.45%	3	-7	Real yields should cheapen on projected ECB taper. Risk: Any growth shock arresting central bank exits.
Buy gilt Dec27 vs Jul19	14-Sep-17	86	86	86	70	94	2	1	The market may price policy error if the MPC hike. Risk: Hike prospects fade, but intl drivers take long-end gilt yields higher.
Rec SEK 1y1y	7-Sep-17	-5.25	-5	-11	-15	9	9	6	RV carry trade given disconnect to EUR Risk: ECB ignores euro strength
€3y 5s30s steepener (Target/stop in PnL terms)	24-Aug-17	71.2	74	79	25	-12.0	5	7	QE tapering is a steepener. Risk: Any risk-off flattening curves globally.
Long 1y10y/short 1y5y/short 1y30y vol	24-Aug-17	-203	-147	-147	100	-250		56	Playing mean reversion. Risk: Strong implied volatility rally & flattening pressure on long-end of curve.
Rec USD 5y5y vs EUR	18-Aug-17	101	112	115	60	125.0	-4	-14	Prefer $ duration over € Hard for belly to sell-off with $5y1y OIS is at 1.93%. Risk: An acceleration in US inflation / GDP beyond trends in Europe.
OAT Feb20 vs May22 steepener	18-Aug-17	33.1	33	33	56	29	-2	0	ECB gradually exiting QE and increased supply in September. Risk: Geo-political tension
Sell SPGBei24 break-even vs BTPei26	6-Jul-17	12	9	9	0	18.0	2	4	Historically wide level. Risk: Continued supply focus in long-dated SPGBei's.
Buy DSL Jul23 vs BNG Jul23	3-Jul-17	-17	-16	-16	-29	-9	-1	-1	Step up in quality before markets are caught by summer inertia. Risk: Bullish market movement during summer absent any supply.
Pay 6m1y1y GBP versus EUR	29-Jun-17	0	-5	-5	40	-20.0		-5	Probability of a BOE hike has been overcooked. Risk: Pricing of a series of BoE hikes.
SEK 2s5s steepener	29-Jun-17	65	61	61	87	54	1	-4	Steepening risk on more hawkish policy rate path. Risk: Dovish outcome from tolerance band in inflation mandate.
Sell SPGBei27 break-even vs OATei27	15-Jun-17	-3.5	-5	-5	-20	5.0	0	2	Relative supply prospects & cash flows could weigh on richness. Risk: Lack of supply in SPGBei27 in favour of SPGBei21.
Buy KFW Jan24 vs CADES Jan24	12-Jun-17	-2	0	0	-16	4	0	-2	End of QE and wider OAT Bund forecasts Risk: Large KFW supply in the 7-year sector of the curve.
OATei47-27 break-even flattener	1-Jun-17	56.5	51	51	45	62.5	-1	5	Fade the richness of OATei47 break-even. Risk: Positive real yield keeps up RM demand in OATei47.
Buy FBAVP Sep24 vs OLO Oct24	31-May-17	23	21	21	10	32	1	3	Historically cheap level Risk: Very large supply by Belgian covered bond issuers.
Buy KfW Jun24 vs OLO Jun24	25-May-17	0	-3	-3	15	-8	-1	-3	With supportive technical at a flat spread, move up in quality. Risk: Downgrade of KfW & heavy supply in the 7yr sector from KfW.
Buy EIB Apr33 vs OAT Oct32*	18-May-17	-6	3	3	-23	15	-2	-12	Supportive fundamentals, technicals and entry level to move up in quality. Risks: High unexpected issuance in 15yr EIB, a downgrade of EIB.
Sell €6m5y5y 1.75% payer / buy 6m5y5y 1.5/1.0% Rec spread	11-May-17	0	2	2	100	180	0	2	Terminal rates likely to be below 2%. Risk: Global taper tantrum.
Long RX vs RFGB Apr26	11-May-17	24	20	20	35	15		-4	ECB will start to hit 33% limit in RFGBs quicker than other core EGBs. Risk: Sudden repo cheapening in Germany
Buy OATei27 break-even vs Bundei26	11-May-17	11	9	9	21	6	0	-2	Cheapest linker on the curve. Risk: Concession that takes the bond past its range vs Bundei26
Buy NRW Dec20 vs ONT Sep20	11-May-17	-2	-7	-7	-10	3	0	5	Canadian provinces have performed too well and look rich. Rish: NRW supply in the front end and QE modality amendments.
Buy €2y1y 0.00/0.27/0.47 payer ladder	15-Dec-16	0	2	2	15	-5		2	Expensive 2y1y payer skew. Risk: 95bp sell off of 1y swap over the life of the trade
Buy €1y--5y5y 1.73/1.37/1.01/0.65 midcurve recr condor	15-Dec-16	60	92	92	150			32	Monetizing 100bp trading range of 5y5y rate. Risk: Strong curve pressures that push 5y5y rate beyond profit range.
Sell 5y5y UK RPI***	15-Dec-16	3.59	3.40	3.39	3.10	3.47		20	Market has got ahead of itself and expect a correction lower. Risk: Higher spot infl creates bullish mood for infl expectations.
Buy gilt Jul26 yield-yield swap vs Dec46	15-Dec-16	36	41	41	50	29		5	10s30s swap spread box tends to reverse when QE pauses. Risks: Futures selling drives 10s cheaper & LDI drives 30s richer.

Note: Futures trading involves substantial risk of loss.

Source: Citi Research, Bloomberg. As at 17:00 London time 2nd November 2017.

Figure 57. Open Trades (Continued)

Trade	Entry Date	Entry level	Live[1]	MTM Level[2]	Target	Stop	Carry 3m (bp)	PnL (bp)	Reasonable basis and risks
Receive € 2y fwd 2s5s10s	15-Dec-16	-12	-12	-16	-28	0	3	4	Forward cheapening unlikely to be realized. Risk: Upside surprise in inflation forcing market to price hawkish ECB.
Sell 5y5y HICPxT inflation swap**	15-Dec-16	1.67	1.66	1.57	1.48	1.60		10	ECB taper slows progress to higher inflation with DEU still the cap. Risks: Higher inflation near term/ pause in supply supports.
Buy EUR 2y2y 0.12/0.37/0.62 payer ladder	15-Dec-16	0	6	6	15	-5		6	Historically cheap reflationary trade. Risk: Disorderly implied vol rally.
Buy KfW Jun24 vs EU Apr24	15-Dec-16	9	9	9	0	15	1	0	Volatility provides opportunity to move to higher rated KfW at a pick-up. Risks: Sell-off in liquid German assets & unexpected KfW 8yr supply.
[1]Trade level if initiated today. [2]The level of our trade marked to market today. * Stop revised on 6 June 2017. ** Target/stop revised on 14 September 2017. *** Target/stop revised on 29 June 2017.									
Book PnL								113	
Closed Trades PnL								353	
Total PnL								467	
Book 3m carry							15		

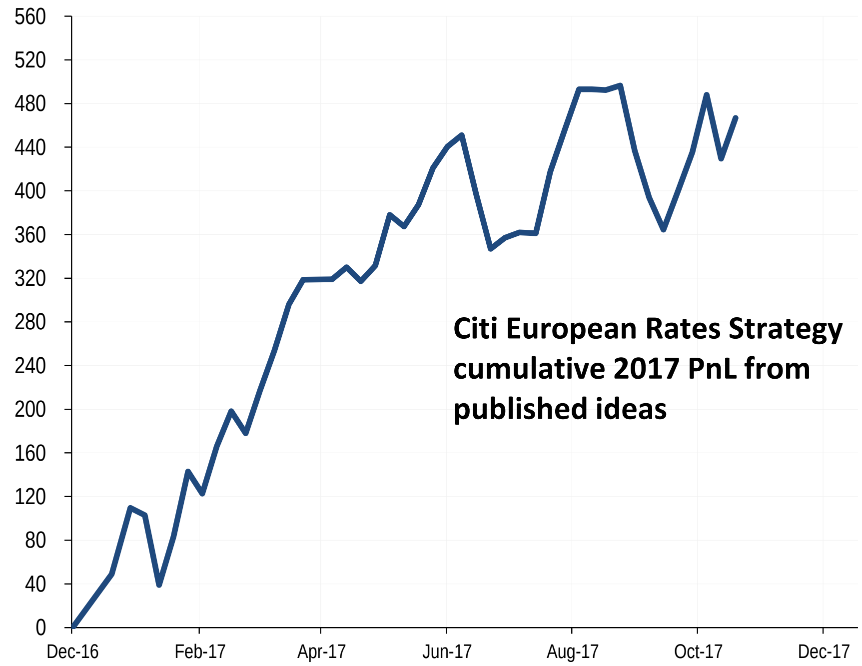
Source: Citi Research. As at 17:00 London time 2nd November 2017.

Figure 58. Closed trades this week

Trade	Close Date	Entry level	Live	Closing MTM Level	Target	Stop	Carry 3m (bp)	PnL (bp)	Reasonable basis and risks
2s5s BTP steepener vs Bunds	Hit Stop 1 Nov 17	64	39	39	114	39	4	-16	Positive carry proxy for 10yr BTP-Bund spread. Risk: Change in the sensitivity of 2s5s BTP-Bund box with 10yr spread.

Source: Citi Research

Figure 59. Cumulative PnL of trades recommended since 2017 Outlook



Source: Citi Research, Bloomberg. P&L on trade ideas includes carry and roll costs but not trading costs. Results should not, and cannot, be viewed as an indicator of future performance.

ECB QE tracker

Figure 60. Monthly ECB QE Tracker (€bn)

	Govts / Agencies	Supras	Total PSPP	ABSPP	CBPP3	CSPP	TOTAL QE
Mar-15	41.7	5.7	47.4	1.2	12.4		60.9
Apr-15	42.0	5.7	47.7	1.2	11.5		60.3
May-15	45.4	6.2	51.6	1.4	10.0		63.1
Jun-15	45.2	6.3	51.4	1.6	10.2		63.2
Jul-15	45.1	6.3	51.4	0.9	9.0		61.3
Aug-15	37.4	5.4	42.8	1.3	7.5		51.6
Sep-15	44.7	6.3	51.0	1.9	10.1		63.0
Oct-15	46.0	6.2	52.2	1.6	10.0		63.7
Nov-15	48.5	6.7	55.1	0.6	6.9		62.6
Dec-15	38.9	5.4	44.3	0.1	5.8		50.3
Jan-16	46.9	6.0	53.0	2.3	7.2		62.4
Feb-16	46.9	6.4	53.4	1.0	7.8		62.1
Mar-16	46.6	6.4	53.1	0.4	7.8		61.3
Apr-16	69.8	8.7	78.5	0.0	6.6		85.2
May-16	72.0	7.7	79.7	0.0	5.6		85.2
Jun-16	65.0	7.0	72.1	0.5	6.1	6.4	85.1
Jul-16	62.9	6.7	69.7	0.9	3.3	6.8	80.6
Aug-16	45.4	5.1	50.5	-0.3	3.5	6.7	60.4
Sep-16	62.9	7.1	70.0	0.5	4.7	9.9	85.1
Oct-16	65.7	7.3	73.0	0.6	3.4	8.4	85.4
Nov-16	63.0	7.2	70.1	1.3	5.0	9.0	85.4
Dec-16	49.6	5.4	55.0	0.3	1.4	4.0	60.8

	Govts / Agencies	Supras	Total PSPP	ABSPP	CBPP3	CSPP	TOTAL QE
Jan-17	64.2	7.2	71.4	0.5	4.7	8.4	85.0
Feb-17	61.4	6.8	68.2	0.1	4.3	7.8	80.5
Mar-17	61.9	6.9	68.8	0.7	2.4	8.3	80.3
Apr-17	48.9	5.4	54.3	-0.4	1.9	6.8	62.6
May-17	46.3	5.2	51.5	-0.1	3.6	7.6	62.5
Jun-17	46.4	5.2	51.6	0.5	3.3	7.0	62.4
Jul-17	46.6	5.3	51.9	0.5	2.5	5.6	60.4
Aug-17	38.5	4.3	42.8	-0.2	2.7	4.7	50.0
Sep-17	45.7	5.1	50.8	-0.3	4.1	8.0	62.6
TOTAL*	1322.3	425.8	1748.1	24.1	231.3	114.7	2118.1

**At amortized cost, at month end*

MONTHLY PURCHASES (€bn) before amortisations

	Germany	France	Italy	Spain	Netherlands	Belgium	Austria	Portugal	Finland	Ireland	Other sovs	Supras	Total PSPP
Mar-15	11.1	8.8	7.6	5.4	2.5	1.5	1.2	1.1	0.8	0.7	1.0	5.7	47.4
Apr-15	11.1	8.6	7.6	5.5	2.5	1.5	1.2	1.1	0.8	0.7	1.3	5.7	47.7
May-15	12.1	9.5	8.2	5.9	2.7	1.7	1.3	1.2	0.8	0.8	1.3	6.2	51.6
Jun-15	12.0	9.4	8.2	5.9	2.7	1.7	1.3	1.2	0.8	0.8	1.3	6.3	51.4
Jul-15	12.0	9.5	8.2	5.9	2.7	1.6	1.4	1.2	0.9	0.8	1.0	6.3	51.4
Aug-15	9.9	8.1	6.7	4.9	2.2	1.4	1.1	1.0	0.7	0.6	0.9	5.4	42.8
Sep-15	11.9	9.5	8.2	5.8	2.6	1.6	1.3	1.1	0.8	0.8	1.0	6.3	51.0
Oct-15	12.2	10.0	8.4	6.0	2.7	1.7	1.3	1.2	0.8	0.8	0.9	6.2	52.2
Nov-15	12.9	10.2	8.9	6.3	2.9	1.8	1.4	1.2	0.9	0.8	1.1	6.7	55.1
Dec-15	10.4	8.3	7.2	5.1	2.2	1.4	1.2	1.0	0.7	0.7	0.6	5.4	44.3
Jan-16	12.3	10.0	8.6	6.1	2.8	1.7	1.3	1.2	0.9	0.8	1.2	6.0	53.0
Feb-16	12.4	10.0	8.5	6.1	2.8	1.7	1.4	1.2	0.9	0.8	1.1	6.4	53.4
Mar-16	12.4	9.9	8.5	6.1	2.8	1.7	1.4	1.2	0.9	0.8	1.0	6.4	53.1
Apr-16	19.0	14.9	13.0	9.3	4.2	2.6	2.1	1.4	1.3	1.1	0.8	8.7	78.5
May-16	19.6	15.4	13.4	9.6	4.4	2.7	2.1	1.5	1.4	1.1	0.8	7.7	79.7
Jun-16	16.9	13.7	12.8	9.2	3.8	2.3	1.8	1.4	1.2	1.1	0.7	7.0	72.1
Jul-16	17.2	13.6	11.9	8.5	3.8	2.4	1.9	1.0	1.2	1.0	0.6	6.7	69.7
Aug-16	12.4	9.8	8.5	6.1	2.9	1.7	1.4	0.7	0.9	0.7	0.4	5.1	50.5
Sep-16	17.2	13.6	11.8	8.5	3.8	2.4	1.9	1.0	1.2	1.0	0.5	7.1	70.0
Oct-16	18.0	14.2	12.3	8.8	4.0	2.5	2.0	1.0	1.3	1.0	0.6	7.3	73.0
Nov-16	17.3	13.5	11.7	8.5	3.8	2.4	1.9	1.0	1.2	1.0	0.8	7.2	70.1
Dec-16	13.6	10.7	9.4	6.7	3.0	1.9	1.5	0.7	0.9	0.6	0.6	5.4	55.0
Jan-17	17.7	14.2	12.3	8.8	4.0	2.5	2.0	0.7	0.8	0.5	0.6	7.2	71.4
Feb-17	17.0	13.6	11.8	8.4	3.8	2.4	1.9	0.66	0.73	0.56	0.7	6.8	68.2
Mar-17	17.0	13.7	11.9	8.5	3.9	2.4	2.0	0.66	0.73	0.57	0.7	6.9	68.8
Apr-17	12.5	11.3	9.8	6.6	3.0	2.0	1.6	0.5	0.7	0.5	0.5	5.4	54.3
May-17	11.9	10.8	9.4	6.0	2.6	1.9	1.5	0.5	0.6	0.5	0.5	5.2	51.5
Jun-17	11.9	10.8	9.3	6.2	2.7	1.9	1.5	0.5	0.6	0.5	0.5	5.2	51.6
Jul-17	12.2	10.1	9.6	6.3	2.7	1.9	1.5	0.5	0.7	0.6	0.5	5.3	51.9
Aug-17	9.8	9.3	7.7	5.1	2.2	1.5	1.2	0.4	0.5	0.5	0.3	4.3	42.8
Sep-17	11.7	11.1	9.2	6.1	2.6	1.9	1.5	0.5	0.2	0.6	0.5	5.1	50.8
Total flow	425.5	345.6	300.6	212.3	95.3	60.2	47.8	29.6	26.9	23.5	24.4	192.6	1784.1
Capital Key	*26%*	*21%*	*18%*	*13%*	*6%*	*4%*	*3%*	*3%*	*2%*	*2%*			

Source: Citi Research, ECB

Figure 61. Monthly ECB QE Tracker – Maturities of portfolio holdings

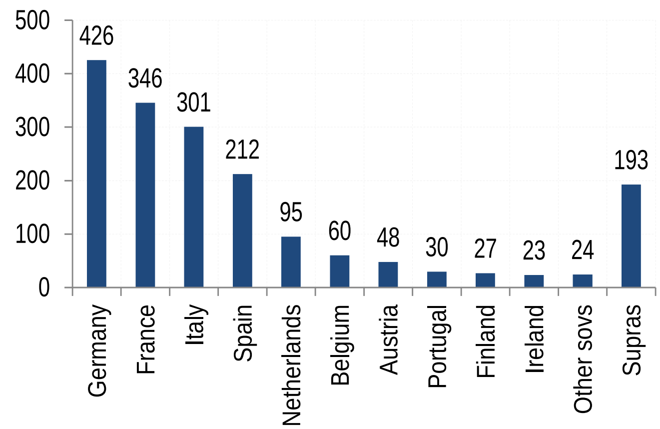
MATURITIES (yrs)

	Germany	France	Italy	Spain	Netherlands	Belgium	Austria	Portugal	Finland	Ireland	Supras	PSPP
Mar-15	8.1	8.2	9.1	11.7	6.7	8.8	7.8	11.0	7.3	9.4	7.3	7.3
Apr-15	7.9	7.8	8.4	9.7	7.0	9.1	8.0	10.8	7.2	9.1	8.1	8.1
May-15	7.1	7.8	8.7	9.7	6.9	9.1	7.8	10.8	7.2	9.6	7.8	7.8
Jun-15	6.9	7.8	8.8	9.8	6.8	9.1	7.7	10.6	7.2	9.6	7.4	8.0
Jul-15	6.9	7.9	9.0	9.7	6.7	8.8	7.9	10.6	7.3	9.8	7.2	8.0
Aug-15	7.1	7.9	9.1	9.7	6.6	8.8	8.0	10.8	7.3	9.7	7.1	8.0
Sep-15	7.0	7.8	9.3	9.7	6.6	9.0	8.0	10.9	7.4	9.1	6.9	8.0
Oct-15	7.0	7.8	9.3	9.7	6.6	9.2	8.1	10.6	7.5	9.0	6.9	8.0
Nov-15	7.0	7.8	9.3	9.7	6.6	9.6	8.3	10.6	7.6	9.3	7.1	8.1
Dec-15	7.0	7.7	9.3	9.7	6.5	9.5	8.5	10.4	7.6	9.4	7.0	8.0
Jan-16	7.0	7.7	9.3	9.8	6.5	9.5	8.4	10.2	7.6	9.5	6.9	8.0
Feb-16	7.0	7.7	9.3	9.8	6.7	9.6	8.4	10.1	7.7	9.5	7.0	8.0
Mar-16	7.1	7.7	9.4	9.7	6.9	9.7	8.5	10.2	7.7	9.4	6.9	8.1
Apr-16	7.2	7.7	9.4	9.6	7.2	9.8	8.7	10.2	7.6	9.5	6.8	8.1
May-16	7.3	7.7	9.3	9.7	7.4	9.8	8.7	10.2	7.6	9.4	6.8	8.1
Jun-16	7.4	7.7	9.3	9.7	7.6	9.7	8.9	10.1	7.5	9.4	6.9	8.2
Jul-16	7.6	7.7	9.2	9.7	7.7	9.8	9.1	10.1	7.6	9.3	7.1	8.3
Aug-16	7.7	7.7	9.2	9.6	7.8	9.9	9.2	9.9	7.6	9.3	7.1	8.3
Sep-16	7.9	7.8	9.2	9.6	7.9	10.0	9.3	9.8	7.6	9.4	7.3	8.4
Oct-16	8.0	7.8	9.1	9.5	8.0	10.1	9.4	9.8	7.7	9.4	7.2	8.4
Nov-16	8.1	7.7	9.0	9.4	8.0	10.0	9.3	9.7	7.4	9.2	7.3	8.3
Dec-16	8.2	7.7	8.9	9.3	8.0	10.0	9.3	9.5	7.4	9.2	7.3	8.3
Jan-17	8.2	7.7	8.9	9.1	8.0	10.1	9.3	9.4	7.4	9.1	7.3	8.3
Feb-17	7.9	7.7	8.8	8.9	7.9	10.0	9.3	9.3	7.3	9.0	7.4	8.2
Mar-17	7.7	7.6	8.7	8.8	7.8	10.1	9.3	9.2	7.3	8.9	7.4	8.1
Apr-17	7.5	7.6	8.7	8.7	7.8	10.2	9.3	9.1	7.3	8.8	7.4	8.0
May-17	7.3	7.7	8.6	8.6	7.7	10.2	9.3	9.0	7.4	8.8	7.4	8.0
Jun-17	7.1	7.6	8.5	8.5	7.6	10.2	9.2	8.9	7.2	8.7	7.4	7.9
Jul-17	7.0	7.8	8.6	8.5	7.7	10.3	9.2	8.7	7.3	8.7	7.5	7.9
Aug-17	6.9	7.7	8.5	8.5	7.6	10.2	9.2	8.6	7.2	8.7	7.5	7.9
Sep-17	6.8	7.7	8.4	8.4	7.6	10.3	9.1	8.6	7.5	8.6	7.6	7.8

Source: Citi Research, ECB

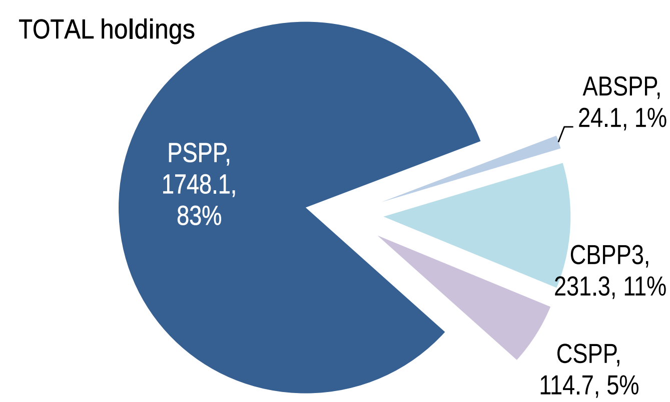
The charts below indicate total holdings at the ECB.

Figure 62. Total PSPP buying flows by sovereign (€bn)



Source: Citi Research, ECB

Figure 63. Total QE holdings (€bn)



Source: Citi Research, ECB

EMU Spread Heatmaps

- We present six cross-country heatmaps based on 3-month Z-scores (Figure 64 to Figure 69). A positive Z-score indicates that current spread is 'cheap' and a negative Z-score indicates 'richness'. Countries that don't have benchmarks in a particular sector have been shaded grey (e.g. 15yr Austria).
  - All spreads have been calculated on the basis of on-the-run benchmarks.
  - Blue color indicates that the current spread is trading historically cheap while red color indicates that the current spread is trading historically rich.
  - For better identification of rich/cheap spreads, we have highlighted cells which have a **Z-Score of greater than 2 or less than -2 in bold italics**.

Figure 64. 3 Year

Sell

Buy	DEU	NLD	AUT	FIN	BEL	FRA	IRL	ITA	ESP	PRT
DEU	0	1.8	1.4	***2.6***	1.7	***2.7***	1.9	2.0	-0.4	1.7
NLD	-1.8	0	0.2	0.2	0.6	1.8	1.7	1.8	-0.8	1.3
AUT	-1.4	-0.2	0	0.0	0.4	1.2	1.9	***2.1***	-0.7	1.3
FIN	***-2.6***	-0.2	0.0	0	0.6	2.0	1.4	1.6	-0.9	1.3
BEL	-1.7	-0.6	-0.4	-0.6	0	1.0	1.2	1.4	-1.1	1.4
FRA	***-2.7***	-1.8	-1.2	-2.0	-1.0	0	0.6	1.2	-1.3	0.9
IRL	-1.9	-1.7	-1.9	-1.4	-1.2	-0.6	0	1.2	-1.2	0.6
ITA	-2.0	-1.8	***-2.1***	-1.6	-1.4	-1.2	-1.2	0	-1.4	-0.1
ESP	0.4	0.8	0.7	0.9	1.1	1.3	1.2	1.4	0	1.8
PRT	-1.7	-1.3	-1.3	-1.3	-1.4	-0.9	-0.6	0.1	-1.8	0

Source: Citi Research

Figure 65. 5 Year

Sell

Buy	DEU	NLD	AUT	FIN	BEL	FRA	IRL	ITA	ESP	PRT
DEU	0	1.9	1.6	0.9	***2.1***	***2.5***	0.6	***2.6***	-0.3	1.6
NLD	-1.9	0	0.6	-0.5	0.7	1.5	0.0	***2.5***	-0.6	1.4
AUT	-1.6	-0.6	0	-1.2	0.0	1.2	-0.6	***2.8***	-0.7	1.5
FIN	-0.9	0.5	1.2	0	1.1	1.8	0.1	***2.7***	-0.6	1.5
BEL	***-2.1***	-0.7	0.0	-1.1	0	1.5	-0.6	***2.6***	-0.7	1.5
FRA	***-2.5***	-1.5	-1.2	-1.8	-1.5	0	-1.7	***2.5***	-0.9	1.3
IRL	-0.6	0.0	0.6	-0.1	0.6	1.7	0	***3.0***	-0.5	1.7
ITA	***-2.6***	***-2.5***	***-2.8***	***-2.7***	***-2.6***	***-2.5***	***-3.0***	0	***-2.1***	0.2
ESP	0.3	0.6	0.7	0.6	0.7	0.9	0.5	***2.1***	0	1.4
PRT	-1.6	-1.4	-1.5	-1.5	-1.5	-1.3	-1.7	-0.2	-1.4	0

Source: Citi Research

Figure 66. 7 Year

Sell

Buy	DEU	NLD	AUT	FIN	BEL	FRA	IRL	ITA	ESP	PRT
DEU	0	1.7	0.7	1.5	1.3	***2.3***	1.4	***2.8***	0.7	1.6
NLD	-1.7	0	-0.8	0.1	0.2	1.9	1.1	***3.0***	0.2	1.6
AUT	-0.7	0.8	0	0.7	0.7	1.9	1.3	***3.0***	0.5	1.6
FIN	-1.5	-0.1	-0.7	0	0.2	***2.1***	1.2	***2.8***	0.2	1.6
BEL	-1.3	-0.2	-0.7	-0.2	0	1.7	1.3	***2.8***	0.1	1.6
FRA	***-2.3***	-1.9	-1.9	***-2.1***	-1.7	0	0.6	***2.8***	-0.2	1.5
IRL	-1.4	-1.1	-1.3	-1.2	-1.3	-0.6	0	***2.9***	-0.4	1.6
ITA	***-2.8***	***-3.0***	***-3.0***	***-2.8***	***-2.8***	***-2.8***	***-2.9***	0	***-2.2***	0.8
ESP	-0.7	-0.2	-0.5	-0.2	-0.1	0.2	0.4	***2.2***	0	1.4
PRT	-1.6	-1.6	-1.6	-1.6	-1.6	-1.5	-1.6	-0.8	-1.4	0

Source: Citi Research

Figure 67. 10 Year

Sell

Buy	DEU	NLD	AUT	FIN	BEL	FRA	IRL	ITA	ESP	PRT
DEU	0	0.9	0.7	1.3	***2.0***	***2.5***	1.5	***2.6***	0.8	1.6
NLD	-0.9	0	0.3	1.0	***2.3***	***3.1***	1.5	***2.7***	0.7	1.6
AUT	-0.7	-0.3	0	0.4	1.8	***2.4***	1.3	***2.7***	0.7	1.6
FIN	-1.3	-1.0	-0.4	0	***2.5***	***2.6***	1.5	***2.6***	0.4	1.6
BEL	***-2.0***	***-2.3***	-1.8	***-2.5***	0	0.7	0.7	***2.4***	0.0	1.5
FRA	***-2.5***	***-3.1***	***-2.4***	***-2.6***	-0.7	0	0.3	***2.5***	-0.1	1.5
IRL	-1.5	-1.5	-1.3	-1.5	-0.7	-0.3	0	***2.3***	-0.2	1.6
ITA	***-2.6***	***-2.7***	***-2.7***	***-2.6***	***-2.4***	***-2.5***	***-2.3***	0	***-2.5***	0.8
ESP	-0.8	-0.7	-0.7	-0.4	0.0	0.1	0.2	***2.5***	0	1.3
PRT	-1.6	-1.6	-1.6	-1.6	-1.5	-1.5	-1.6	-0.8	-1.3	0

Source: Citi Research

Figure 68. 15 Year (no current benchmark for Austria)

Sell

Buy	DEU	NLD	AUT	FIN	BEL	FRA	IRL	ITA	ESP	PRT
DEU	0	-0.2		1.6	***2.0***	1.9	1.5	***2.6***	1.3	1.7
NLD	0.2	0		***2.0***	***2.4***	***2.5***	1.7	***2.7***	1.4	1.8
AUT										
FIN	-1.6	***-2.0***		0	1.6	1.1	1.2	***2.4***	0.5	1.7
BEL	***-2.0***	***-2.4***		-1.6	0	-0.8	0.6	***2.2***	0.1	1.6
FRA	-1.9	***-2.5***		-1.1	0.8	0	0.8	***2.4***	0.2	1.6
IRL	-1.5	-1.7		-1.2	-0.6	-0.8	0	2.0	-0.2	1.7
ITA	***-2.6***	***-2.7***		***-2.4***	***-2.2***	***-2.4***	-2.0	0	***-2.3***	1.0
ESP	-1.3	-1.4		-0.5	-0.1	-0.2	0.2	***2.3***	0	1.4
PRT	-1.7	-1.8		-1.7	-1.6	-1.6	-1.7	-1.0	-1.4	0

Source: Citi Research

Figure 69. 30 Year

Sell

Buy	DEU	NLD	AUT	FIN	BEL	FRA	IRL	ITA	ESP	PRT
DEU	0	***-2.1***	0.5	1.2	1.6	1.8	1.4	***2.8***	1.3	1.5
NLD	***2.1***	0	1.0	***2.5***	1.9	***2.1***	1.6	***2.8***	1.5	1.6
AUT	-0.5	-1.0	0	-0.1	1.4	1.5	1.2	***2.7***	1.3	1.5
FIN	-1.2	***-2.5***	0.1	0	1.6	1.8	1.3	***2.7***	1.2	1.5
BEL	-1.6	-1.9	-1.4	-1.6	0	-0.2	0.4	***2.6***	0.4	1.4
FRA	-1.8	***-2.1***	-1.5	-1.8	0.2	0	0.5	***2.8***	0.5	1.4
IRL	-1.4	-1.6	-1.2	-1.3	-0.4	-0.5	0	***2.7***	0.2	1.4
ITA	***-2.8***	***-2.8***	***-2.7***	***-2.7***	***-2.6***	***-2.8***	***-2.7***	0	***-2.6***	0.1
ESP	-1.3	-1.5	-1.3	-1.2	-0.4	-0.5	-0.2	***2.6***	0	1.1
PRT	-1.5	-1.6	-1.5	-1.5	-1.4	-1.4	-1.4	-0.1	-1.1	0

Source: Citi Research

Euro Relative Value Screen – All Maturities

Figure 70. Coupon adjusted spread (CAS) to fitted curve and swap curve by country (6m history) - all bonds on each curve

Versus Govt Curve (CAS) | Versus Swap Curve (CAS)

GERMANY

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	1.50 Sep22	-1.69	Sep12	18	Richest	1	2.50 Aug46	0.44	Feb14	23
	2	0.00 Aug26	-1.44	Jul16	25		2	2.50 Jul44	0.44	Apr12	22
	3	0.00 Oct22	-1.35	Jul17	14		3	3.25 Jul42	0.72	Jul10	15
	4	0.50 Feb26	-1.25	Jan16	26		4	0.50 Aug27	1.12	Jul17	20
	5	0.00 Apr22	-1.11	Feb17	18		5	4.75 Jul40	1.24	Jul08	16
	5	3.00 Jul20	1.81	Apr10	22		5	0.50 Feb25	2.91	Jan15	23
	4	1.00 Aug24	1.83	Sep14	18		4	1.50 May24	2.94	May14	18
	3	1.75 Feb24	1.84	Jan14	18		3	2.00 Aug23	3.05	Sep13	18
	2	0.00 Apr21	2.17	Feb16	21		2	1.00 Aug24	3.17	Sep14	18
Cheapest	1	0.00 Apr20	2.25	Jan15	20	Cheapest	1	1.75 Feb24	3.39	Jan14	18

FRANCE

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	0.50 May26	-2.84	Mar16	28	Richest	1	1.75 May66	-0.97	Apr16	7
	2	0.25 Nov26	-2.06	Sep16	28		2	2.00 May48	-0.76	May17	13
	3	0.00 Feb20	-1.93	Jan17	28		3	4.00 Apr60	-0.73	Mar10	8
	4	3.50 Apr26	-1.93	Jul10	36		4	1.75 Jun39	-0.68	Jan17	9
	5	0.50 May25	-1.72	Feb15	33		5	4.00 Apr55	-0.65	Feb05	15
	5	4.00 Apr60	0.93	Mar10	8		5	3.25 Oct21	1.13	Jun11	40
	4	1.50 May31	0.93	Oct15	34		4	3.75 Apr21	1.30	May05	39
	3	4.00 Apr55	1.21	Feb05	15		3	0.00 May21	1.61	Apr16	24
	2	0.25 Nov20	1.68	Sep15	25		2	2.50 Oct20	1.73	Oct10	37
Cheapest	1	3.25 May45	2.04	Apr13	25	Cheapest	1	0.25 Nov20	1.84	Sep15	25

ITALY

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	0.90 Aug22	-3.44	Aug17	14	Richest	1	2.80 Mar67	-2.76	Oct16	6
	2	5.00 Mar25	-2.91	Jul09	25		2	3.45 Mar48	-2.64	Jun17	8
	3	2.05 Aug27	-2.38	Jul17	16		3	3.25 Sep46	-2.59	Jan15	16
	4	4.50 Feb20 (BTS)	-2.35	Mar04	23		4	2.70 Mar47	-2.55	Feb16	16
	5	5.50 Sep22 (MFB)	-2.16	Mar12	20		5	4.75 Sep44	-2.48	May13	17
	5	0.45 Jun21	2.20	Apr16	17		5	4.00 Sep20	-1.10	Apr10	25
	4	0.35 Nov21	2.26	Oct16	14		4	0.35 Jun20	-1.09	Apr17	17
	3	1.65 Mar32	2.26	Mar15	22		3	0.65 Nov20	-1.08	Nov15	15
	2	0.95 Mar23	3.08	Mar16	16		2	0.70 May20	-1.00	May15	16
Cheapest	1	1.25 Dec26	3.41	Aug16	18	Cheapest	1	1.05 Dec19	-0.89	Dec14	15

N'LANDS

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	0.25 Jul25	-2.31	Mar15	15	Richest	1	3.75 Jan42	0.94	May10	15
	2	2.00 Jul24	-2.16	Mar14	15		2	2.75 Jan47	0.97	Feb14	13
	3	3.75 Jan42	-2.07	May10	15		3	0.75 Jul27	1.47	Feb17	13
	4	0.00 Jan22	-1.98	Jun16	15		4	3.50 Jul20	1.65	Feb10	15
	5	4.00 Jan37	-1.55	Apr05	15		5	4.00 Jan37	1.66	Apr05	15
	5	0.75 Jul27		Feb17	13		5	2.25 Jul22	2.34	Feb12	15
	4	0.25 Jan20		Sep14	15		4	3.75 Jan23	2.41	Feb06	4
	3	3.25 Jul21	1.17	Mar11	16		3	2.00 Jul24	2.44	Mar14	15
	2	2.50 Jan33	1.29	Mar12	14		2	2.50 Jan33	2.56	Mar12	14
Cheapest	1	2.75 Jan47	3.74	Feb14	13	Cheapest	1	1.75 Jul23	2.92	Mar13	16

SPAIN

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.90 Jul26 (KOA)	-2.30	Mar11	19	Richest	1	3.45 Jul66	-1.68	May16	6
	2	5.15 Oct44	-2.04	Oct13	13		2	2.90 Oct46	-0.99	Mar16	13
	3	1.60 Apr25	-1.69	Jan15	20		3	5.15 Oct44	-0.95	Oct13	13
	4	4.70 Jul41	-1.64	Sep09	17		4	4.70 Jul41	-0.86	Sep09	17
	5	2.15 Oct25	-1.41	Jun15	21		5	4.20 Jan37	-0.67	Jan05	20
	5	5.40 Jan23	1.12	Jan13	22		5	1.40 Jan20	2.46	Jul14	23
	4	1.15 Jul20	1.38	Jun15	19		4	4.00 Apr20	2.53	Jan10	23
	3	1.95 Apr26	1.52	Jan16	20		3	0.05 Jan21	2.59	Jun17	7
	2	2.90 Oct46	2.82	Mar16	13		2	1.15 Jul20	2.65	Jun15	19
Cheapest	1	3.45 Jul66	5.61	May16	6	Cheapest	1	4.85 Oct20	2.67	Jul10	18

BELGIUM

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.75 Sep20	-1.63	Jan10	19	Richest	1	2.15 Jun66	-1.21	May16	3
	2	3.75 Jun45	-1.38	Sep13	10		2	2.25 Jun57	-1.05	Feb17	3
	3	4.25 Sep21	-1.27	Jan11	17		3	3.75 Jun45	-0.85	Sep13	10
	4	1.00 Jun31	-0.91	Feb15	10		4	1.60 Jun47	-0.78	Mar16	9
	5	1.45 Jun37	-0.87	May17	3		5	4.25 Mar41	-0.66	Apr10	17
	5	1.60 Jun47	1.32	Mar16	9		5	2.25 Jun23	1.33	Jan13	14
	4	1.90 Jun38	1.41	Sep15	7		4	3.75 Sep20	1.37	Jan10	19
	3	2.15 Jun66	1.71	May16	3		3	0.20 Oct23	1.47	May16	6
	2	3.00 Jun34	1.85	Mar14	7		2	4.25 Sep22	1.52	Jan12	16
Cheapest	1	0.20 Oct23	2.52	May16	6	Cheapest	1	4.00 Mar22	1.53	May06	14

Source: Citi Research

Euro Relative Value Screen – Sub-12yr

Figure 71. Coupon adjusted spread (CAS) to fitted curve and swap curve by country (6m history) - bonds with a maximum maturity of 12yrs

GERMANY

	Versus Govt Curve (CAS) Rank		ZScore	Issued	Size (€bn)		Versus Swap Curve (CAS) Rank		ZScore	Issued	Size (€bn)
Richest	1	1.50 Sep22	-1.69	Sep12	18	Richest	1	0.50 Aug27	1.12	Jul17	20
	2	0.00 Aug26	-1.44	Jul16	25		2	3.25 Jan20	1.64	Nov09	22
	3	0.00 Oct22	-1.35	Jul17	14		3	2.25 Sep20	1.87	Aug10	16
	4	0.50 Feb26	-1.25	Jan16	26		4	0.00 Oct21	1.89	Jul16	19
	5	0.00 Apr22	-1.11	Feb17	18		5	2.50 Jan21	1.97	Nov10	19
	5	3.00 Jul20	1.81	Apr10	22		5	0.50 Feb25	2.91	Jan15	23
	4	1.00 Aug24	1.83	Sep14	18		4	1.50 May24	2.94	May14	18
	3	1.75 Feb24	1.84	Jan14	18		3	2.00 Aug23	3.05	Sep13	18
	2	0.00 Apr21	2.17	Feb16	21		2	1.00 Aug24	3.17	Sep14	18
Cheapest	1	0.00 Apr20	2.25	Jan15	20	Cheapest	1	1.75 Feb24	3.39	Jan14	18

FRANCE

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	0.50 May26	-2.84	Mar16	28	Richest	1	0.50 May26	-0.14	Mar16	28
	2	0.25 Nov26	-2.06	Sep16	28		2	3.50 Apr26	-0.14	Jul10	36
	3	0.00 Feb20	-1.93	Jan17	28		3	0.25 Nov26	-0.08	Sep16	28
	4	3.50 Apr26	-1.93	Jul10	36		4	2.75 Oct27 (OAT)	-0.03	Sep12	37
	5	0.50 May25	-1.72	Feb15	33		5	1.00 Nov25	-0.02	Sep15	28
	5	2.25 May24	0.44	Nov13	33		5	3.25 Oct21	1.13	Jun11	40
	4	2.25 Oct22 (BTA)	0.76	Oct12	32		4	3.75 Apr21	1.30	May05	39
	3	2.50 Oct20	0.79	Oct10	37		3	0.00 May21	1.61	Apr16	24
	2	0.00 May21	0.89	Apr16	24		2	2.50 Oct20	1.73	Oct10	37
Cheapest	1	0.25 Nov20	1.68	Sep15	25	Cheapest	1	0.25 Nov20	1.84	Sep15	25

ITALY

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	0.90 Aug22	-3.44	Aug17	14	Richest	1	2.05 Aug27	-2.23	Jul17	16
	2	5.00 Mar25	-2.91	Jul09	25		2	5.00 Mar25	-2.11	Jul09	25
	3	2.05 Aug27	-2.38	Jul17	16		3	2.20 Jun27	-2.06	Feb17	16
	4	4.50 Feb20 (BTS)	-2.35	Mar04	23		4	4.75 Sep28 (IK)	-2.05	Jan13	22
	5	5.50 Sep22 (MFB)	-2.16	Mar12	20		5	2.50 Dec24	-2.03	Sep14	20
	5	3.75 May21	1.76	Oct13	18		5	4.00 Sep20	-1.10	Apr10	25
	4	0.45 Jun21	2.20	Apr16	17		4	0.35 Jun20	-1.09	Apr17	17
	3	0.35 Nov21	2.26	Oct16	14		3	0.65 Nov20	-1.08	Nov15	15
	2	0.95 Mar23	3.08	Mar16	16		2	0.70 May20	-1.00	May15	16
Cheapest	1	1.25 Dec26	3.41	Aug16	18	Cheapest	1	1.05 Dec19	-0.89	Dec14	15

N'LANDS

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	0.25 Jul25	-2.31	Mar15	15	Richest	1	0.75 Jul27	1.46	Feb17	13
	2	2.00 Jul24	-2.18	Mar14	15		2	3.50 Jul20	1.65	Feb10	15
	3	0.00 Jan22	-2.03	Jun16	15		3	0.50 Jul26	1.86	Mar16	15
	4	3.75 Jan23	-1.20	Feb06	4		4	0.25 Jan20	1.88	Sep14	15
	5	0.50 Jul26	-1.17	Mar16	15		5	0.25 Jul25	2.07	Mar15	15
	5	2.25 Jul22		Feb12	15		5	3.25 Jul21	2.11	Mar11	16
	4	3.50 Jul20		Feb10	15		4	2.25 Jul22	2.33	Feb12	15
	3	0.75 Jul27	0.83	Feb17	13		3	3.75 Jan23	2.40	Feb06	4
	2	0.25 Jan20	1.06	Sep14	15		2	2.00 Jul24	2.44	Mar14	15
Cheapest	1	3.25 Jul21	1.17	Mar11	16	Cheapest	1	1.75 Jul23	2.91	Mar13	16

SPAIN

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	5.90 Jul26 (KOA)	-2.30	Mar11	19	Richest	1	4.65 Jul25	-0.30	Feb10	23
	2	1.60 Apr25	-1.69	Jan15	20		2	5.90 Jul26 (KOA)	-0.28	Mar11	19
	3	2.15 Oct25	-1.41	Jun15	21		3	2.15 Oct25	-0.23	Jun15	21
	4	2.75 Oct24	-1.38	Jun14	24		4	1.60 Apr25	-0.23	Jan15	20
	5	4.65 Jul25	-1.29	Feb10	23		5	1.30 Oct26 (FBB)	-0.20	Jul16	23
	5	0.05 Jan21	0.91	Jun17	7		5	1.40 Jan20	2.46	Jul14	23
	4	1.40 Jan20	0.98	Jul14	23		4	4.00 Apr20	2.53	Jan10	23
	3	5.40 Jan23	1.12	Jan13	22		3	0.05 Jan21	2.59	Jun17	7
	2	1.15 Jul20	1.38	Jun15	19		2	1.15 Jul20	2.65	Jun15	19
Cheapest	1	1.95 Apr26	1.52	Jan16	20	Cheapest	1	4.85 Oct20	2.67	Jul10	18

BELGIUM

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	3.75 Sep20	-1.63	Jan10	19	Richest	1	0.80 Jun27	0.44	Jan17	14
	2	4.25 Sep21	-1.30	Jan11	17		2	1.00 Jun26	0.55	Jan16	14
	3	2.60 Jun24	-0.81	Jan14	16		3	4.50 Mar26	0.61	Jun11	11
	4	0.50 Oct24	-0.74	Feb17	5		4	0.50 Oct24	0.82	Feb17	5
	5	4.50 Mar26	-0.03	Jun11	11		5	0.80 Jun25	0.83	Jan15	16
	5	4.00 Mar22	0.55	May06	14		5	2.25 Jun23	1.33	Jan13	14
	4	4.25 Sep22	0.70	Jan12	16		4	3.75 Sep20	1.37	Jan10	19
	3	0.80 Jun27	0.85	Jan17	14		3	0.20 Oct23	1.47	May16	6
	2	0.80 Jun25	1.34	Jan15	16		2	4.25 Sep22	1.52	Jan12	16
Cheapest	1	0.20 Oct23	2.52	May16	6	Cheapest	1	4.00 Mar22	1.53	May06	14

Source: Citi Research

Euro Relative Value Screen – 8yr+

Figure 72. Coupon adjusted spread (CAS) to fitted curve and swap curve by country (6m history) - bonds with a minimum maturity of 8yrs

Versus Govt Curve (CAS) | Versus Swap Curve (CAS)

GERMANY

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	0.00 Aug26	-1.44	Jul16	25	Richest	1	2.50 Aug46	0.44	Feb14	23
	2	0.50 Feb26	-1.25	Jan16	26		2	2.50 Jul44	0.44	Apr12	22
	3	0.25 Feb27	-1.09	Jan17	26		3	3.25 Jul42	0.72	Jul10	15
	4	3.25 Jul42	-0.71	Jul10	15		4	0.50 Aug27	1.12	Jul17	20
	5	2.50 Jul44	-0.69	Apr12	22		5	4.75 Jul40	1.24	Jul08	16
	5	6.25 Jan30	1.31	Jan00	9		5	0.25 Feb27	2.28	Jan17	26
	4	4.75 Jul34	1.32	Jan03	20		4	4.75 Jul34	2.34	Jan03	20
	3	4.00 Jan37	1.37	Jan05	23		3	0.50 Feb26	2.41	Jan16	26
	2	2.50 Aug46	1.59	Feb14	23		2	5.50 Jan31	2.71	Oct00	17
Cheapest	1	5.50 Jan31	1.62	Oct00	17	Cheapest	1	6.25 Jan30	2.74	Jan00	9

FRANCE

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	0.50 May26	-2.84	Mar16	28	Richest	1	1.75 May66	-0.97	Apr16	7
	2	0.25 Nov26	-2.06	Sep16	28		2	2.00 May48	-0.76	May17	13
	3	3.50 Apr26	-1.93	Jul10	36		3	4.00 Apr60	-0.73	Mar10	8
	4	1.00 Nov25	-1.66	Sep15	28		4	1.75 Jun39	-0.68	Jan17	9
	5	1.00 May27	-1.21	Apr17	31		5	4.00 Apr55	-0.65	Feb05	15
	5	1.25 May36	0.51	Apr16	23		5	1.50 May31	-0.06	Oct15	34
	4	4.00 Apr60	0.93	Mar10	8		4	2.75 Oct27 (OAT)	-0.03	Sep12	37
	3	1.50 May31	0.93	Oct15	34		3	1.00 Nov25	-0.02	Sep15	28
	2	4.00 Apr55	1.21	Feb05	15		2	2.50 May30	0.00	May14	33
Cheapest	1	3.25 May45	2.04	Apr13	25	Cheapest	1	1.00 May27	0.01	Apr17	31

ITALY

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.05 Aug27	-2.38	Jul17	16	Richest	1	2.80 Mar67	-2.76	Oct16	6
	2	5.00 Sep40	-1.77	Sep09	22		2	3.45 Mar48	-2.64	Jun17	8
	3	4.75 Sep44	-1.70	May13	17		3	3.25 Sep46	-2.59	Jan15	16
	4	4.75 Sep28 (IK)	-1.57	Jan13	22		4	2.70 Mar47	-2.55	Feb16	16
	5	5.00 Aug39	-1.56	Oct07	21		5	4.75 Sep44	-2.48	May13	17
	5	2.00 Dec25	0.76	Sep15	18		5	1.65 Mar32	-2.04	Mar15	22
	4	2.25 Sep36	1.33	Apr16	15		4	2.00 Dec25	-2.01	Sep15	18
	3	1.60 Jun26	1.62	Mar16	18		3	1.60 Jun26	-1.97	Mar16	18
	2	1.65 Mar32	2.26	Mar15	22		2	4.50 Mar26	-1.92	Sep10	21
Cheapest	1	1.25 Dec26	3.41	Aug16	18	Cheapest	1	1.25 Dec26	-1.88	Aug16	18

N'LANDS

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.75 Jan42	-2.07	May10	15	Richest	1	3.75 Jan42	0.94	May10	15
	2	4.00 Jan37	-1.54	Apr05	15		2	2.75 Jan47	0.96	Feb14	13
	3	0.50 Jul26	-1.17	Mar16	15		3	0.75 Jul27	1.46	Feb17	13
	3	0.75 Jul27	0.83	Feb17	13		3	4.00 Jan37	1.66	Apr05	15
	2	2.50 Jan33	1.30	Mar12	14		2	0.50 Jul26	1.86	Mar16	15
Cheapest	1	2.75 Jan47	3.17	Feb14	13	Cheapest	1	2.50 Jan33	2.56	Mar12	14

SPAIN

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.90 Jul26 (KOA)	-2.31	Mar11	19	Richest	1	3.45 Jul66	-1.68	May16	6
	2	5.15 Oct44	-2.07	Oct13	13		2	2.90 Oct46	-1.00	Mar16	13
	3	4.70 Jul41	-1.67	Sep09	17		3	5.15 Oct44	-0.95	Oct13	13
	4	2.15 Oct25	-1.36	Jun15	21		4	4.70 Jul41	-0.87	Sep09	17
	5	4.20 Jan37	-1.29	Jan05	20		5	4.20 Jan37	-0.67	Jan05	20
	5	4.90 Jul40	0.32	Jun07	16		5	1.50 Apr27	-0.18	Jan17	18
	4	1.95 Jul30	1.03	Mar15	20		4	5.15 Oct28	-0.08	Jul13	18
	3	1.95 Apr26	1.49	Jan16	20		3	1.95 Jul30	-0.08	Mar15	20
	2	2.90 Oct46	2.73	Mar16	13		2	1.95 Apr26	0.00	Jan16	20
Cheapest	1	3.45 Jul66	5.39	May16	6	Cheapest	1	1.45 Oct27	0.16	Jul17	14

BELGIUM

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.75 Jun45	-1.37	Sep13	10	Richest	1	2.15 Jun66	-1.21	May16	3
	2	1.00 Jun31	-1.01	Feb15	10		2	2.25 Jun57	-1.05	Feb17	3
	3	1.45 Jun37	-0.84	May17	3		3	3.75 Jun45	-0.85	Sep13	10
	4	4.25 Mar41	-0.67	Apr10	17		4	1.60 Jun47	-0.77	Mar16	9
	5	4.00 Mar32	-0.61	Mar12	8		5	4.25 Mar41	-0.66	Apr10	17
	5	0.80 Jun27	0.85	Jan17	14		5	5.00 Mar35	0.12	May04	20
	4	1.90 Jun38	1.35	Sep15	7		4	3.00 Jun34	0.38	Mar14	7
	3	1.60 Jun47	1.35	Mar16	9		3	0.80 Jun27	0.44	Jan17	14
	2	3.00 Jun34	1.81	Mar14	7		2	1.00 Jun26	0.55	Jan16	14
Cheapest	1	2.15 Jun66	1.91	May16	3	Cheapest	1	4.50 Mar26	0.61	Jun11	11

Source: Citi Research

UK Relative Value Screen

Figure 73. Coupon adjusted spread (CAS) to fitted curve and swap curve by maturity (6m history)

ALL

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.00 Mar18	-2.16	May07	35
	2	4.25 Dec46	-2.07	May06	23
	3	4.50 Mar19	-1.43	Sep08	36
	4	4.25 Dec55	-1.40	May05	26
	5	4.00 Jan60	-1.38	Oct09	23
	5	1.50 Jul47	1.43	Sep16	20
	4	2.50 Jul65	1.63	Oct15	19
	3	1.50 Jan21	1.73	Sep15	32
	2	3.75 Sep21	2.01	Mar11	28
Cheapest					

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.50 Jul68	1.17	Jun13	19
	2	2.50 Jul65	1.28	Oct15	19
	3	5.00 Mar18	1.34	May07	35
	4	4.00 Jan60	1.92	Oct09	23
	5	1.75 Jul57	1.94	Jan17	10
	5	0.50 Jul22	4.45	Aug16	29
	4	2.00 Sep25	4.48	Mar15	28
	3	5.00 Mar25	4.70	Sep01	35
	2	1.25 Jul27	4.72	Mar17	18
Cheapest	1	2.75 Sep24	5.23	Mar14	27

2yr - 7yr

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	0.50 Jul22 (5y)	-0.96	Aug16	29
	2	1.75 Sep22	-0.74	Jun12	29
	3	2.25 Sep23	-0.47	Jun13	27
	4	0.75 Jul23	-0.32	Jul17	9
	5	2.75 Sep24	0.49	Mar14	27
	5	4.00 Mar22 (WX)	0.68	Feb09	38
	4	2.00 Jul20	0.82	Sep14	32
	3	3.75 Sep20	1.34	Jun10	25
	2	1.50 Jan21	1.92	Sep15	32
Cheapest	1	3.75 Sep21	2.08	Mar11	28

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.75 Sep20	2.43	Jun10	25
	2	4.75 Mar20	2.54	Mar05	33
	3	2.00 Jul20	2.61	Sep14	32
	4	1.50 Jan21	3.30	Sep15	32
	5	3.75 Sep21	3.70	Mar11	28
	5	0.75 Jul23	4.27	Jul17	9
	4	1.75 Sep22	4.43	Jun12	29
	3	2.25 Sep23	4.45	Jun13	27
	2	0.50 Jul22 (5y)	4.48	Aug16	29
Cheapest	1	2.75 Sep24	5.26	Mar14	27

7yr - 15yr

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	1.50 Jul26	-0.73	Feb16	27
	2	4.25 Jun32	0.01	May00	35
	3	4.75 Dec30	0.30	Oct07	34
	4				
	5				
	5				
	4				
	3	4.25 Dec27 (10y-G)	1.00	Sep06	31
	2	2.00 Sep25	1.08	Mar15	28
Cheapest	1	5.00 Mar25	1.18	Sep01	35

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.25 Dec27 (10y-G)	3.67	Sep06	31
	2	1.50 Jul26	4.08	Feb16	27
	3	4.25 Jun32	4.18	May00	35
	4				
	5				
	5				
	4				
	3	2.00 Sep25	4.51	Mar15	28
	2	5.00 Mar25	4.72	Sep01	35
Cheapest	1	1.25 Jul27	4.75	Mar17	18

>15yr

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.25 Dec46	-1.89	May06	23
	2	4.25 Dec55	-1.26	May05	26
	3	4.25 Dec49	-1.21	Sep08	20
	4	4.00 Jan60	-1.20	Oct09	23
	5	3.75 Jul52	-1.03	Sep11	24
	5	4.75 Dec38	0.89	Apr04	25
	4	1.75 Sep37	1.30	Nov16	10
	3	1.50 Jul47 (30y)	1.61	Sep16	20
	2	2.50 Jul65	2.51	Oct15	19
Cheapest					

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.50 Jul68	1.19	Jun13	19
	2	2.50 Jul65	1.30	Oct15	19
	3	4.00 Jan60	1.95	Oct09	23
	4	1.75 Jul57	1.96	Jan17	10
	5	4.25 Dec55	2.15	May05	26
	5	1.50 Jul47 (30y)	3.39	Sep16	20
	4	1.75 Sep37	3.48	Nov16	10
	3	4.75 Dec38	3.53	Apr04	25
	2	4.25 Mar36	3.87	Feb03	30
Cheapest	1	4.50 Sep34	3.99	Jun09	32

Source: Citi Research

4 Week Auction Calendar: Euro, UK and US

Figure 74. Auction calendar for the next four weeks (provisional): gross issuance (local currency, billions) and DV01 (USD million/bp)*

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures TYZ7 (UST)	G Z7 (Gilt)	RXZ7 (Bund)
07 Nov (Tue)	Austria	1.2	RAGB 0% Sep22 and 0.5% Apr27 (issue confirmed, combined size €1.15bn)				6k
07 Nov (Tue)	Germany	0.5	Bundei30 (issue and size confirmed)				5k
07 Nov (Tue)	UK	3.5	Syndicated new IL48 (w/c 6 Nov, estimated size)			248k	
07 Nov (Tue)	US	24.0	New 3-Year		77k		
08 Nov (Wed)	Germany	3.0	Bobl 0% Oct22 (issue and size confirmed)				11k
08 Nov (Wed)	US	23.0	New 10-Year		250k		
09 Nov (Thu)	Ireland	1.0	Ireland (estimated size)				10k
09 Nov (Thu)	UK	2.8	0.75% Treasury gilt 2023 (issue confirmed, estimated size)			15k	
09 Nov (Thu)	US	15.0	New 30-Year		336k		
			Weekly $DV01 of Issuance	94.0			
			Total Number of Futures Contracts		663k	263k	32k

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures TYZ7 (UST)	G Z7 (Gilt)	RXZ7 (Bund)
13 Nov (Mon)	Italy	7.0	BTP 0.2% Oct20, 1.45% Nov24 and >10yr (estimated issue and size)				39k
13 Nov (Mon)	Italy	7.0	New 6yr BTP Italia (13-16 Nov, estimated size)				45k
14 Nov (Tue)	Germany	5.0	New Schatz Dec19 (issue and size confirmed)				7k
14 Nov (Tue)	Netherlands	2.5	DSL 0.75% Jul27 (issue confirmed, size €2-3bn)				17k
15 Nov (Wed)	Germany	3.0	Bund 0.5% Aug27 (issue and size confirmed)				20k
16 Nov (Thu)	France	6.5	OAT 2yr-7yr (estimated size)				18k
16 Nov (Thu)	France	1.5	OATi/ei (estimated size)				10k
16 Nov (Thu)	Spain	4.0	Bonos (estimated size)				28k
16 Nov (Thu)	UK	2.5	1.25% Treasury gilt 2027 (issue confirmed, estimated size)			23k	
16 Nov (Thu)	US	11.0	10-Year TIPS (re-opening)		128k		
			Weekly $DV01 of Issuance	43.7			
			Total Number of Futures Contracts		128k	23k	184k

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures TYZ7 (UST)	G Z7 (Gilt)	RXZ7 (Bund)
20 Nov (Mon)	Belgium	2.2	OLO 10yr and 20yr (estimated tenors and size)				16k
21 Nov (Tue)	UK	1.0	IL26 (issue confirmed, estimated size)			11k	
21 Nov (Tue)	US	13.0	2-Year FRN (re-opening)		42k		
22 Nov (Wed)	Germany	1.0	Bund 1.25% Aug48 (issue and size confirmed)				18k
			Weekly $DV01 of Issuance	10.4			
			Total Number of Futures Contracts		42k	11k	34k

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures TYZ7 (UST)	G Z7 (Gilt)	RXZ7 (Bund)
27 Nov (Mon)	Italy	1.0	BTPei (estimated size)				6k
27 Nov (Mon)	Italy	2.0	CTZ Oct19 (estimated issue and size)				2k
27 Nov (Mon)	US	26.0	New 2-Year		83k		
27 Nov (Mon)	US	34.0	New 5-Year		183k		
28 Nov (Tue)	US	28.0	New 7-Year		215k		
29 Nov (Wed)	Italy	5.0	BTP 0.9% Aug22 and 2.05% Aug27 (estimated issue and size)				22k
29 Nov (Wed)	Italy	1.75	CCTeu Apr25 (estimated issue and size)				6k
			Weekly $DV01 of Issuance	43.5			
			Total Number of Futures Contracts		481k	0k	36k

* Additional issues expected in November: Finland (re-opening) and Portugal (re-opening).

Source: DMOs, Citi Research

Projected FTSE gilt index changes

Here we present our projections of FTSE conventional and linker indices in 2017.

Figure 75. FTSE Actuaries gilt index: Projected changes due to coupon payments, redemptions and bucket changes[6]

Date*	Event	Bond	All Stock	0-5	5+	5-10	5-15	10-15	15+
12-Jan-17	Coupon Payment	-	-0.09	-0.01	0.10	0.00	-0.01	-0.02	-0.09
23-Jan-17	Redemption	UKT 1.75% Jan17	0.27	0.16					
16-Feb-17	Coupon Payment	-	0.03	-0.01	0.06	-0.01	0.00	0.00	0.04
24-Feb-17	Coupon Payment	-	0.14	0.02	0.13	0.08	0.06	0.00	0.14
8-Mar-17	Bucket Change	UKT 4% Mar22		0.20	0.46	0.36	0.36		
29-May-17	Coupon Payment	-	0.07	-0.01	0.11	-0.01	0.03	0.15	0.14
8-Jun-17	Bucket Change	UKT 4.25% Jun32					0.53	0.60	0.61
13-Jul-17	Coupon Payment	-	0.03	0.00	0.01	0.00	0.00	0.00	0.03
24-Jul-17	Bucket Change	UKT 0.5% Jul22		0.15	0.30	0.35	0.22		
16-Aug-17	Coupon Payment	-	-0.02	-0.01	-0.03	-0.01	-0.01	0.00	-0.03
25-Aug-17	Redemption	UKT 8.75% Aug17	0.09	0.05					
29-Aug-17	Coupon Payment	-	0.12	0.02	0.11	0.06	0.05	0.01	0.12
7-Sep-17	Redemption	UKT 1% Sep17	0.31	0.17					
8-Sep-17	Bucket Change	UKT 1.75% Sep22		0.13	0.30	0.29	0.28		
28-Nov-17	Coupon Payment	-	0.05	0.00	0.10	0.00	0.06	0.16	0.11
8-Dec-17	Bucket Change	UKT 4.25% Dec27				0.32		0.48	

Source: Citi Research, Bloomberg. * *Ex-dividend dates for coupon payment. Changes >0.1 years highlighted in bold.*

Figure 76. FTSE Actuaries index-linked gilt index: Projected changes due to coupon payments, redemptions and bucket changes[6]

Date*	Event	Bond	All Stock	0-5	5yr+	5-15	15+
6-Jan-17	Coupon Payment	-	-0.02	0.00	-0.01	0.00	-0.01
12-Jan-17	Coupon Payment	-	-0.10	-0.01	-0.09	-0.01	-0.07
17-Jan-17	Coupon Payment	-	0.01	0.00	0.00	-0.01	0.01
13-Mar-17	Coupon Payment	-	0.00	0.00	0.00	0.00	0.00
6-Apr-17	Coupon Payment	-	-0.01	-0.01	-0.01	-0.01	-0.01
11-May-17	Coupon Payment	-	-0.01	-0.01	-0.01	-0.01	0.00
12-May-17	Coupon Payment	-	0.00	0.00	0.00	0.00	0.00
6-Jul-17	Coupon Payment	-	-0.01	-0.01	-0.01	-0.01	-0.01
13-Jul-17	Coupon Payment	-	0.00	0.00	0.00	0.00	0.01
17-Jul-17	Coupon Payment	-	0.07	0.00	0.08	0.01	0.08
13-Sep-17	Coupon Payment	-	0.03	-0.01	0.00	0.00	0.03
5-Oct-17	Coupon Payment	-	0.06	-0.01	0.05	0.00	0.04
13-Nov-17	Coupon Payment	-	0.00	0.00	0.00	0.00	0.00
22-Nov-17	Redemption	IL17	0.51	0.62			
23-Nov-17	Bucket Change	IL22 / IL32		0.77	0.97	1.49	0.96

Source: Citi Research, Bloomberg. * *Ex-dividend dates for coupon payment. Changes >0.1 years highlighted in bold.*

[6] Several factors like yield level and curve shape affect the calculations and are subject to change. The changes for past dates are realised and also include any change in index duration due to daily change in yield.

EMU: Coupons & Redemptions (Next 3mths)

Figure 77. EMU-11/UK bond redemptions over the next three months (Local currency, bn)

	Redemptions = €150bn											
Redemptions	**DEU 33**	**FRA 0**	**NLD 13**	**ITA 55**	**ESP 19**	**BEL 0**	**AUT 12**	**FIN 0**	**PRT 0**	**GRC 0**	**IRL 0**	**GBR 16**
(Sun) 12-Nov-17				18.1								
(Wed) 22-Nov-17												16.3
(Fri) 15-Dec-17	13.0											
(Thu) 04-Jan-18	20.0											
(Mon) 15-Jan-18			13.3	15.3			12.2					
(Wed) 31-Jan-18					19.5							
(Thu) 01-Feb-18				21.9								

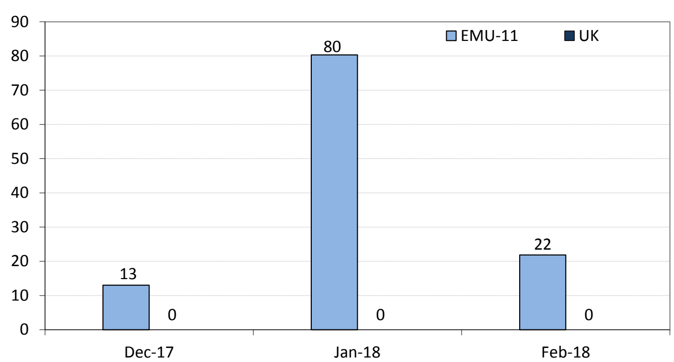
Source: DMOs, Bloomberg, Citi Research *This table is on a calendar-date basis*

Figure 78. EMU-11/UK coupon payments over the next three months (Local currency, bn)

	Coupons = €36bn											
Coupons	**DEU 7**	**FRA 1**	**NLD 4**	**ITA 8**	**ESP 7**	**BEL 0**	**AUT 1**	**FIN 0**	**PRT 0**	**GRC 0**	**IRL 0**	**GBR 7**
(Sun) 12-Nov-17				0.19								
(Wed) 15-Nov-17				0.3								
(Wed) 22-Nov-17							0.4					0.8
(Sat) 25-Nov-17		1.4										
(Thu) 30-Nov-17					0.4							
(Fri) 01-Dec-17				1.8								
(Thu) 07-Dec-17												2.5
(Fri) 15-Dec-17				0.3								
(Thu) 04-Jan-18	7.18											
(Mon) 15-Jan-18			3.8	0.1			0.57					
(Wed) 17-Jan-18												0.2
(Mon) 22-Jan-18												3.5
(Fri) 26-Jan-18							0.1					0.1
(Wed) 31-Jan-18					6.9							
(Thu) 01-Feb-18				5.77								

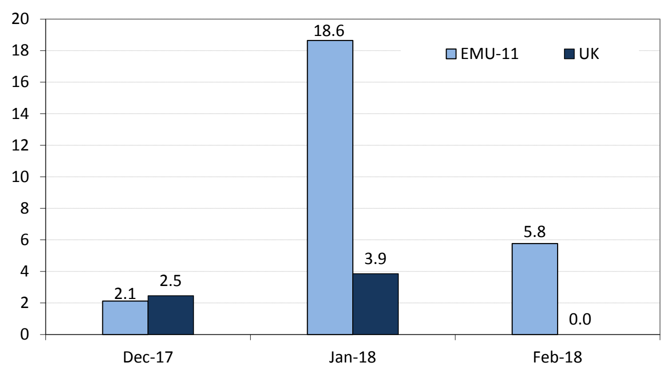
Source: DMOs, Bloomberg, Citi Research *This table is on a calendar-date basis*

Figure 79. EMU-11/UK remaining redemptions (rolling 3m, LC, bn)



Source: DMOs, Bloomberg, Citi Research *This chart is on a calendar-date basis*

Figure 80. EMU-11/UK remaining coupons (rolling 3m, LC, bn)



Source: DMOs, Bloomberg, Citi Research *This chart is on a calendar-date basis*

Inflation Forecasts, Carry & Weekly Changes

Figure 81. Citi Inflation Forecasts

	EUR HICPxT			France CPIxT			UK RPI			US CPURNSA		
Month	Index Forecast	MoM Change	YoY Change	Index Forecast	MoM Change	YoY Change	Index Forecast	MoM Change	YoY Change	Index Forecast	MoM Change	YoY Change
Sep 17	102.04	0.4	1.5	101.30	-0.2	0.9	275.10	0.1	3.9	246.82	0.5	2.2
Oct 17	102.14	0.1	1.3	101.39	0.1	1.0	276.16	0.4	4.3	246.63	-0.1	2.0
Nov 17	102.11	-0.0	1.4	101.29	-0.1	0.9	276.88	0.3	4.3	246.08	-0.2	2.0
Dec 17	102.41	0.3	1.1	101.51	0.2	0.8	278.04	0.4	4.1	245.68	-0.2	1.8
Jan 18	101.32	-1.1	0.9	100.98	-0.5	0.6	276.69	-0.5	4.2	246.13	0.2	1.4
Feb 18	101.66	0.3	0.9	101.12	0.1	0.6	278.29	0.6	3.7	247.29	0.5	1.5

Source: Citi Research, Bloomberg

Shaded = Already released

Figure 82. One week yield changes and inflation-linked carry (based on forecasts above)

Bond	RY (%)	Chg (bp)	Carry-adj chg	Carry: RY (bp) 1 Dec	1 Jan	1 Feb	*Reference Conventional*	BE (bp)	Chg (bp)	Carry-adj chg	Carry: BE (bp) 1 Dec	1 Jan	1 Feb	ZC Swap - BE Spread (bp)	Chg (bp)
Repo (%)				*1.28*	*1.30*	*1.31*									
TIPS 2.125% 1/19	-0.27	-10	-15	34	16	-21	*T-1.500-01/31/19*	178	10	14	32	13	-25	20	10
TIPS 0.125% 4/19	-0.09	-11	-15	28	15	-12	*T-1.625-04/30/19*	163	11	15	27	12	-18	19	-6
TIPS 1.875% 7/19	-0.49	-16	-19	22	9	-17	*T-0.875-07/31/19*	207	16	19	21	6	-22	15	-12
TIPS 1.375% 1/20	-0.17	-10	-12	18	9	-9	*T-1.375-01/31/20*	182	8	10	17	6	-13	15	1
TIPS 0.125% 4/20	-0.03	-8	-10	17	9	-6	*T-1.375-04/30/20*	172	6	8	15	6	-11	17	2
TIPS 1.25% 7/20	-0.24	-9	-12	15	7	-8	*T-2.000-07/31/20*	195	7	9	13	4	-12	18	-5
TIPS 1.125% 1/21	-0.06	-9	-11	13	7	-5	*T-2.125-01/31/21*	184	5	7	11	4	-9	15	1
TIPS 0.125% 4/21	0.06	-9	-11	12	7	-4	*T-1.375-04/30/21*	176	5	6	11	4	-8	16	-3
TIPS 0.625% 7/21	-0.08	-9	-11	11	6	-4	*T-2.250-07/31/21*	194	4	5	10	3	-8	15	-3
TIPS 0.125% 1/22	0.08	-9	-11	10	5	-3	*T-1.500-01/31/22*	185	3	4	9	3	-7	14	1
TIPS 0.125% 4/22	0.15	-9	-10	9	5	-2	*T-1.875-03/31/22*	181	3	4	8	3	-6	14	-3
TIPS 0.125% 7/22	0.04	-10	-11	9	5	-3	*T-1.625-08/15/22*	193	3	4	7	2	-6	15	-3
TIPS 0.125% 1/23	0.19	-9	-10	8	5	-2	*T-2.000-02/15/23*	186	2	3	7	2	-5	14	1
TIPS 0.375% 7/23	0.17	-9	-10	7	4	-2	*T-2.500-08/15/23*	192	1	1	6	2	-5	16	-1
TIPS 0.625% 1/24	0.29	-10	-11	7	4	-1	*T-2.750-02/15/24*	186	2	3	6	2	-5	16	-0
TIPS 0.125% 7/24	0.28	-10	-11	6	4	-1	*T-2.375-08/15/24*	192	1	2	5	2	-5	17	-3
TIPS 2.375% 1/25	0.38	-10	-11	6	4	-1	*T-2.000-02/15/25*	186	1	2	5	2	-4	18	-0
TIPS 0.25% 1/25	0.38	-10	-10	6	4	-1	*T-2.000-02/15/25*	186	0	1	5	2	-4	18	-0
TIPS 2% 1/26	0.45	-9	-10	6	4	0	*T-1.625-02/15/26*	185	-0	1	5	2	-3	21	-0
TIPS 0.625% 1/26	0.44	-9	-10	5	4	0	*T-1.625-02/15/26*	186	-0	0	4	1	-3	21	-0
TIPS 0.125% 7/26	0.43	-10	-10	5	3	0	*T-1.500-08/15/26*	189	-0	0	4	1	-3	24	-2
TIPS 2.375% 1/27	0.50	-10	-10	5	4	0	*T-6.625-02/15/27*	177	-1	-0	4	1	-3	33	-0
TIPS 0.375% 1/27	0.50	-9	-10	5	3	0	*T-2.250-02/15/27*	184	-1	-0	4	1	-3	25	-0
TIPS 0.375% 7/27	0.47	-9	-10	5	3	0	*T-2.375-05/15/27*	188	-1	-0	4	1	-3	28	-2
TIPS 1.75% 1/28	0.53	-10	-11	5	3	0	*T-6.125-11/15/27*	178	1	1	4	1	-3	35	-2
TIPS 3.625% 4/28	0.56	-12	-12	5	3	0	*T-5.500-08/15/28*	179	1	2	4	1	-3	33	-2
TIPS 2.5% 1/29	0.57	-11	-12	4	3	0	*T-5.250-02/15/29*	178	0	1	4	1	-3	37	-1
TIPS 3.875% 4/29	0.61	-11	-12	5	3	0	*T-5.250-02/15/29*	175	0	1	4	1	-3	39	-3
TIPS 3.375% 4/32	0.62	-11	-12	4	3	0	*T-5.375-02/15/31*	177	-1	-0	3	1	-2	40	-1
TIPS 2.125% 2/40	0.80	-11	-12	2	2	0	*T-4.625-02/15/40*	189	-2	-2	2	0	-2	27	-0
TIPS 2.125% 2/41	0.82	-11	-11	2	2	0	*T-4.750-02/15/41*	190	-2	-2	2	0	-2	26	-0
TIPS 0.75% 2/42	0.85	-11	-12	2	2	0	*T-3.125-02/15/42*	191	-2	-2	1	0	-2	25	-1
TIPS 0.625% 2/43	0.87	-11	-11	2	2	0	*T-3.125-02/15/43*	192	-2	-2	1	0	-2	24	-1
TIPS 1.375% 2/44	0.88	-11	-12	2	2	0	*T-3.625-02/15/44*	191	-2	-2	1	0	-2	26	-1
TIPS 0.75% 2/45	0.89	-11	-12	2	1	0	*T-2.500-02/15/45*	193	-2	-2	1	0	-2	23	-1
TIPS 1% 2/46	0.89	-11	-12	2	1	0	*T-2.500-02/15/46*	194	-2	-1	1	0	-2	23	-1
TIPS 0.875% 2/47	0.88	-11	-11	2	1	0	*T-3.000-02/15/47*	194	-2	-2	1	0	-2	23	-1

Source: Citi Research, Bloomberg. As at 17:00 London time 2 November 2017.

Figure 83. EUR Inflation-linked Carry (based on forecasts above) – One week changes

Bond	RY (%)	Chg (bp)	Carry-adj chg	Carry: RY (bp) 1 Dec	1 Jan	1 Feb	*Reference Conventional*	BE (bp)	Chg (bp)	Carry-adj chg	Carry: BE (bp) 1 Dec	1 Jan	1 Feb	ZC Swap - BE Spread (bp)	Chg (bp)
Repo (%)				*-0.36*	*-0.36*	*-0.36*									
BUNDei20	-1.58	1	-2	12	12	6	*DBR 1/20*	82	-3	-0	13	15	11	20	6
BUNDei23	-1.37	-5	-6	5	6	4	*DBR 1/22*	87	0	2	6	6	4	33	-1
BUNDei26	-1.09	-5	-6	4	4	3	*DBR 2/25*	107	-1	-0	3	3	2	27	-0
BUNDei30	-0.69	-5	-6	3	3	3	*DBR 1/30*	121	-2	-1	2	2	1	31	1
BUNDei46	-0.38	-5	-6	1	2	2	*DBR 8/46*	156	-2	-1	1	1	0	32	1
OATei20	-1.87	-7	-9	10	9	3	*FRTR 4/20*	127	2	5	10	11	5	20	-3
OATei21	-1.67	-6	-8	8	8	4	*FRTR 4/21*	120	1	3	8	9	5	16	-2
OATei22	-1.55	-8	-9	6	6	3	*FRTR 4/21*	107	2	4	6	7	4	33	-3
OATei24	-1.20	-7	-8	5	5	3	*FRTR 10/23*	112	-1	0	4	4	2	31	-1
OATei27	-0.82	-9	-10	4	4	4	*FRTR 4/26*	117	-0	0	3	3	1	35	-1
OATei30	-0.54	-8	-9	3	4	3	*FRTR 5/30*	145	-2	-1	2	2	0	17	1
OATei32	-0.49	-7	-8	3	4	3	*FRTR 10/32*	151	-2	-2	2	2	0	17	1
OATei40	-0.23	-7	-8	2	2	2	*FRTR 4/41*	167	-2	-2	1	1	0	18	2
OATei47	-0.05	-7	-7	1	2	2	*FRTR 5/45*	168	-2	-2	1	0	-1	25	1
OATi19	-1.64	-8	-7	-14	-16	-30	*FRTR 4/19*	96	5	5	-12	-12	-24	29	1
OATi21	-1.41	-6	-5	-6	-6	-11	*FRTR 4/21*	94	0	-0	-6	-5	-10	31	1
OATi23	-1.22	-8	-8	-4	-4	-7	*FRTR 10/23*	114	0	0	-4	-4	-8	18	-2
OATi25	-0.95	-10	-10	-2	-2	-4	*FRTR 5/25*	119	1	1	-3	-3	-6	15	-3
OATi28	-0.60	-9	-9	-2	-1	-2	*FRTR 10/27*	122	-0	-1	-2	-3	-5	28	-1
OATi29	-0.62	-7	-7	-2	-1	-2	*FRTR 4/29*	137	-3	-3	-2	-3	-5	23	2
BTPei19	-1.38	-6	-9	16	18	11	*BTPS 9/19*	113	1	4	16	17	10	25	5
BTPei21	-0.79	-9	-11	9	11	9	*BTPS 9/21*	105	0	2	8	8	5	29	2
BTPei22	-0.46	-11	-13	8	10	9	*BTPS 4/22*	93	-0	1	7	7	5	35	-1
BTPei23	-0.21	-15	-16	7	9	9	*BTPS 8/23*	100	1	2	5	5	3	36	0
BTPei24	0.14	-17	-18	6	9	9	*BTPS 9/24*	104	1	2	4	5	3	35	-0
BTPei26	0.46	-17	-19	5	8	8	*BTPS 3/26*	103	-0	1	4	3	2	43	1
BTPei28	0.78	-15	-17	5	7	7	*BTPS 9/28*	114	-3	-2	3	2	1	36	2
BTPei32	1.00	-13	-14	3	5	6	*BTPS 3/32*	121	-3	-3	2	2	1	46	4
BTPei35	1.00	-15	-15	3	5	5	*BTPS 8/34*	142	-5	-5	1	1	0	33	5
BTPei41	1.40	-16	-16	3	4	5	*BTPS 9/40*	143	-4	-4	1	1	-1	43	4
SPGBEI19	-1.49	-2	-5	14	15	9	*SPGB 10/19*	120	0	3	14	14	8	15	-1
SPGBEI21	-1.11	-7	-8	8	9	7	*SPGB 7/21*	112	2	4	7	7	4	20	-3
SPGBEI24	-0.29	-7	-9	6	7	7	*SPGB 10/24*	111	-1	-0	4	4	2	27	-0
SPGBEI27	0.26	-11	-12	4	6	6	*SPGB 4/27*	112	2	2	3	3	1	38	-3
SPGBEI30	0.55	-9	-10	3	5	5	*SPGB 7/30*	127	0	1	2	2	1	34	-1

Source: Citi Research. As at 17:00 London time 2 November 2017.

Figure 84. UK Gilts Inflation-linked Carry (based on forecasts above) – One week changes

Bond	RY (%)	Chg (bp)	Carry-adj chg	Carry: RY (bp) 1 Dec	1 Jan	1 Feb	*Reference Conventional*	BE (bp)	Chg (bp)	Carry-adj chg	Carry: BE (bp) 1 Dec	1 Jan	1 Feb	ZC Swap - BE Spread (bp)	Chg (bp)
Repo (%)				*0.46*	*0.46*	*0.46*									
UKTi Nov19	-2.76	-11	-14	-6	0	-1	*UKT 9/19*	313	3	5	-5	1	0	38	11
UKTi Apr20	-2.52	-16	-16	0	0	-1	*UKT 3/20*	291	5	5	0	0	0	37	6
UKTi Nov22	-2.30	-17	-18	-2	2	2	*UKT 3/22*	288	4	5	-2	1	1	55	5
UKTi Mar24	-2.06	-18	-19	-1	2	2	*UKT 3/25*	304	4	4	-2	0	0	26	-2
UKTi Jul24	-2.01	-18	-18	1	1	-22	*UKT 3/25*	299	4	4	0	0	-24	47	2
UKTi Mar26	-1.84	-16	-17	-1	2	3	*UKT 9/25*	289	2	2	-1	0	0	43	-1
UKTi Nov27	-1.81	-16	-17	0	2	2	*UKT 12/27*	307	1	2	-1	0	0	35	2
UKTi Mar29	-1.72	-14	-15	0	1	2	*UKT 12/30*	321	0	1	-1	0	0	15	0
UKTi Jul30	-1.72	-15	-16	1	1	-12	*UKT 12/30*	321	2	2	0	0	-15	26	1
UKTi Nov32	-1.69	-13	-14	0	1	2	*UKT 6/32*	328	-0	-0	-1	0	-1	22	2
UKTi Mar34	-1.64	-12	-13	0	1	2	*UKT 9/34*	334	-1	-1	-1	0	-1	14	1
UKTi Jan35	-1.63	-13	-13	0	1	-8	*UKT 3/36*	338	0	0	0	-1	-11	13	1
UKTi Nov36	-1.62	-12	-12	0	1	1	*UKT 3/36*	337	-1	-0	-1	-1	-1	18	1
UKTi Nov37	-1.62	-12	-12	0	1	1	*UKT 12/38*	342	-0	-0	-1	0	-1	13	1
UKTi Mar40	-1.60	-11	-11	0	1	1	*UKT 12/40*	344	-1	-1	-1	-1	-1	7	0
UKTi Nov42	-1.58	-10	-10	0	1	1	*UKT 12/42*	344	-2	-2	-1	-1	-1	12	3
UKTi Mar44	-1.54	-10	-10	0	1	1	*UKT 1/44*	342	-2	-2	-1	0	-1	9	1
UKTi Mar46	-1.53	-10	-10	0	1	1	*UKT 1/45*	340	-2	-2	-1	0	-1	8	1
UKTi Nov47	-1.53	-10	-10	0	1	1	*UKT 12/46*	339	-2	-2	-1	0	-1	11	1
UKTi Mar50	-1.53	-10	-10	0	1	1	*UKT 12/49*	333	-2	-2	-1	0	-1	11	0
UKTi Mar52	-1.53	-9	-9	0	1	1	*UKT 7/52*	329	-2	-2	0	0	-1	12	1
UKTi Nov55	-1.53	-8	-9	0	1	1	*UKT 12/55*	324	-2	-2	0	0	0	15	1
UKTi Nov56	-1.53	-9	-9	0	1	1	*UKT 12/55*	324	-2	-2	0	0	-1	14	1
UKTi Mar58	-1.55	-9	-9	0	0	1	*UKT 1/60*	323	-2	-2	0	0	0	12	-0
UKTi Mar62	-1.57	-9	-9	0	0	1	*UKT 1/60*	325	-2	-2	0	0	-1	9	-0
UKTi Nov65	-1.59	-9	-9	0	0	1	*UKT 7/65*	323	-2	-2	0	0	0	11	0
UKTi Mar68	-1.62	-9	-10	0	0	1	*UKT 7/68*	326	-2	-2	0	0	0	7	-1

Source: Citi Research. As at 17:00 London time 2 November 2017.

Summary of Recent Publications

Date	Publication	Topic	Page	Region
31-Oct-17	NOTE	Global Inflation Strategy Monthly - Bullish into year end	-	Global
31-Oct-17	NOTE	EGB Supply Monthly - Net cash requirement marginally non-supportive for OATs	-	EUR
31-Oct-17	NOTE	Bearish medium-term plays via spread caps	-	EUR
30-Oct-17	NOTE	The Month-end RV Pack	-	EUR
26-Oct-17	European Weekly	The nuances of the ECB delivery	2	EUR
		Periphery spreads – as you were	9	EUR
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		Euro inflation – trading supply	15	EUR
		EUR 30y tail payer swaption skews looking cheap	17	EUR
		SSA outlook increasingly benign for Q4	19	EUR
26-Oct-17	NOTE	Weekly Supply Monitor - Euro, US and UK Supply Outlook	-	Global
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		EGB spreads – tapering calibration crucial, but mind the politics too	7	EUR
		Bono spreads and Catalonia – turbulence, but no break-out	11	EUR
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19-Oct-17	NOTE	European Inflation-linked Index Projections - changes most supportive for France	-	EUR
19-Oct-17	NOTE	EMU Month-End Index Projections - changes most supportive for France	-	EUR
12-Oct-17	European Weekly	ECB QE scenarios – how will rates react?	2	EUR
		Is the Austrian election being overlooked?	8	EUR
		UK - Carney testifies	10	UK
		Euro inflation – HICPxT swaps look rich	12	EUR
		EUR - Forward curve & rolldown of receiver swaptions at the front-end	14	EUR
		SSA spreads remain firm amid a pick-up in issuance	16	EUR
		Covered bond redemptions	17	EUR
12-Oct-17	NOTE	Weekly Supply Monitor - Euro, US and UK Supply Outlook	-	Global
11-Oct-17	NOTE	Covered Bond Redemptions 2018	-	EUR
10-Oct-17	NOTE	European SSA & Covered Bond Monthly - Trading QE taper	-	EUR

Appendix A-1

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